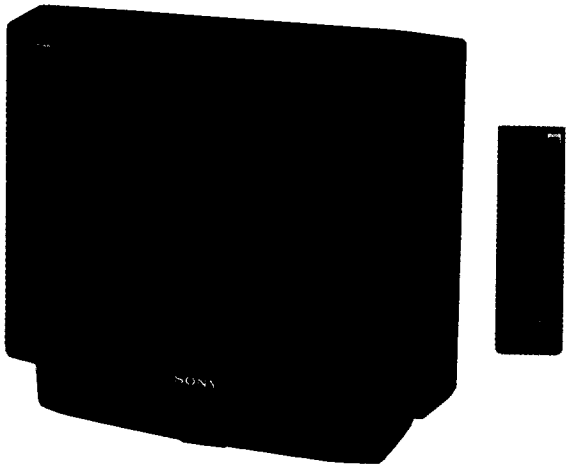
KV-M2140B
RM-694

SERVICE MANUAL

French Model
Chassis No. SCC-E24C-A



BE-2A CHASSIS

MODELS OF THE SAME SERIES	
KV-M2140B	
KV-M1620B	
KV-M1420B	

SPECIFICATIONS

【KV-M2140B】

Television system	B/G/H/L
Color system	PAL/SECAM
Channel coverage	B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV : S1-S20 L VHF : 02-10, B-Q UHF : F21-F69
Picture tube	Black Trinitron tube 90° degree deflection Approx. 54.5 cm (21 inches) (Approx.51.0cm picture measured diagonally)
Inputs	21-pin connector : CENELEC standard Including RGB input Audio/Video input jacks : phono jacks S-Video input
Outputs	21-pin connector : CENELEC standard Headphones jack : minijack
Sound output	5 W (Music)
Power consumption	70.5 Wh
Dimensions	Approx. 513x475x487 mm (w/h/d)
Weight	Approx. 24.9 kg

【RM-694】

Remote control system	infrared control
Power requirements	3V dc 2 batteries IEC designation R6 (size AA)
Dimensions	Approx. 55×18×185mm (w/h/d)
Weight	Approx. 100g including batteries
Accessories supplied	IEC designation R6 batters (2)
Supplied accessories	RM-694 Remote Commander (1) IEC designation R6 batteries (2)

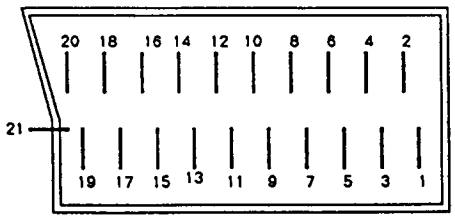
Design and specifications are subject to change without notice.

MICROFILM

TRINITRON® COLOR TV

SONY®

21-pin Euro Connector Configuration



PIN	SIGNAL	SPECIFICATION
1	Audio output	0.5Vrms/1kilohm or less
2	Audio input	0.5Vrms/10kilohms or more
3	Audio output	0.5Vrms/1kilohm or less
4	Earth (audio)	
5	Earth (B-input)	
6	Audio input	0.5Vrms/10kilohms or more
7	B-input	0.7Vp-p/75ohms
8	Function switching	9.5V to 12V
9	Earth (G-input)	
10		
11	G-input	0.7Vp-p/75ohms
12		
13	Earth (R-input)	
14	Earth (blanking)	
15	R-input	0.7Vp-p/75ohms
16	Fast blanking	1V to 3V/75ohms
17	Earth (video)	
18	Earth (fast blanking)	
19	Video output	1Vp-p/75ohms
20	Video input	1Vp-p/75ohms
21	Screening plug	

4 pin connector (S-4)

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB 75ohm, positive Sync 0.3V ± 3 dB
4	C (S signal) input	0.3V ± 3dB 75ohm positive

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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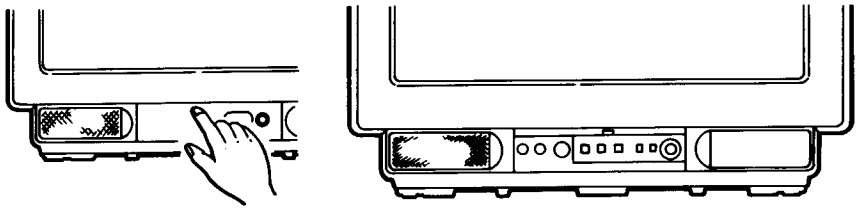
Note) The layout, etc., will be slightly different from the operating instructions packed with the units.

SECTION 1
GENERAL

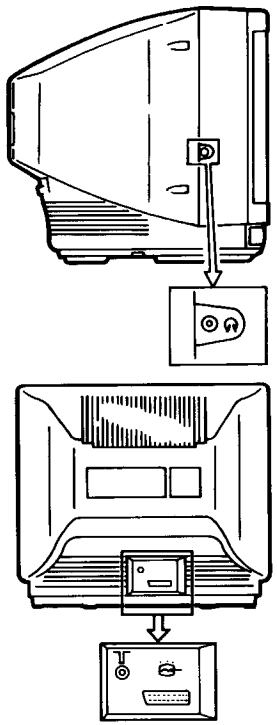
1-1. INDEX OF THE PARTS

In the following you will find a short description of the parts and their function on the set or on the remote commander using the respective symbols. For more details reter to the page number given in the index.

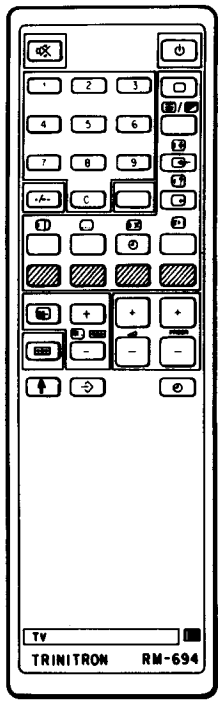
TV Set — Front



TV Set — Rear



Remote Commander



TV set

Symbol	Function
∩	Headphones jack (mini-jack)
V	Video input jack
A	Audio input jack
+/−	Buttons for Sound and picture adjustment
+/−	Programme scanning buttons
S	S-video input jack
⏻	Standby indicator
⏻	Power switch
⊤	Aerial socket (rear of the set)
	21-Pin connector (rear of the set)

Remote Commander

Symbol	Function
	Mute button
1−9, 0, −/−−	Number buttons − in case of two digit numbers first press button −/−− and then two number buttons
✱	Button has no function
	Select button for picture adjustment item
+/−	Buttons for adjustment picture items
↑ and +/−	Buttons for manual fine tuning of a channel
→ • ←	Button for resetting the picture adjustment items to standard
C	Button for clearing a programme position (in preset mode)
↑	Functions only in combination with other buttons
and ↑	Preset mode on/off buttons
⏻	Buttons for switching the TV set into standby mode
	Used to return to TV-mode from stadby and video input modes
	Button for selecting the video input mode
	On/off button for onscreen display
PROGR +/−	Programme scanning butlons
+/−	Buttons for adjusting the volume
	Button for activating the sleep timer

Note Buttons not referred to in this index have no function.

1-2. TO PRESET CHANNELS

The control buttons to preset channels are located on the Remote Commander. (Up to 60 programme positions are at your disposal.)

1 Press the power switch on the set to switch it on.

2 Press both the ↑ (shift) button and the (preset) button simultaneously. You are now in the preset mode.

3 Use either button PROGR + (upwards) or PROGR − (downwards) to select the required programme position.

4 Press both the ↑ button and the + or − button repeatedly until the desired TV station is found.

5 Repeat steps 3 and 4 for all other channels.

6 Press once more both the ↑ button and the (preset) button in order to return to the TV mode and to store the channels.

Skipping of programme positions

Using both the button C and the ↑ button you have the possibility to skip unused programme positions (e.g. without a stored station) when pressing the PROGR +/− buttons.

1 Press both the ↑ button and the (preset) button to select the preset mode.

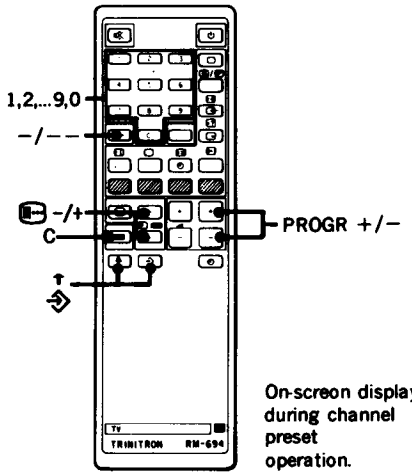
2 Select the programme position to be skipped by pressing the + or − PROGR button.

3 Press the C button.

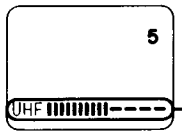
4 Prees both the (preset) button and the ↑ button to return to the TV mode.

Manual Fine Tuning

If the reception of a channel is not satisfactory you have the possibility to deactivate the Automatic Fine Tuning which usually tunes in the best possible picture during presetting.
Press both the ↑ button and the + or − button to fine ture the channel. By pressing the respective programme number the automatic Fine Tuning will be restored.

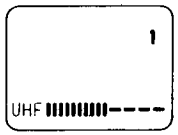


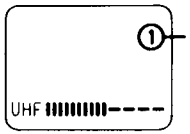
On-screen display during channel preset operation.



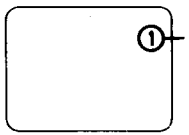
Programme position flashes.

Indicates the approximate location in the band of the channel being tuned in.





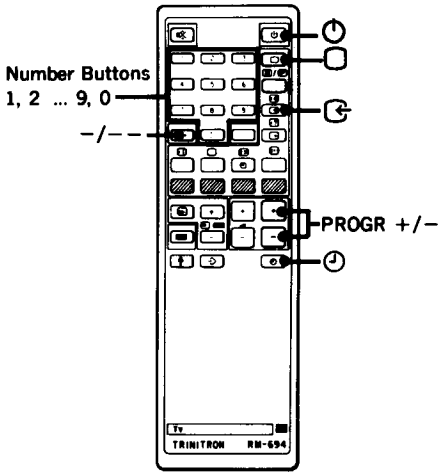
Programme number stops flashing.

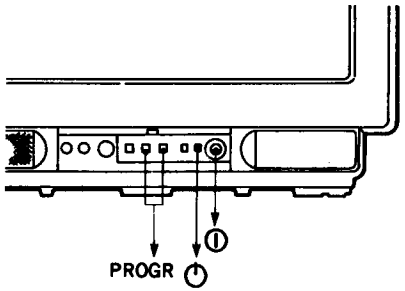


On-screen display after presetting.

1-3. DAILY USE OF THE TV

Your TV set is supposed to be operated with the Remote Commander, for the basic functions however it is also possible to use the buttons on the set itself.





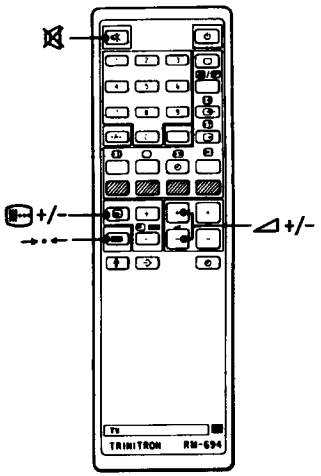
- **Switching the set on**
  Press the power switch on the set to switch the TV on. if the set is switched on. the green indicator on the set lights up, if it is in standby mode the red indicator lights up (see also 'Standby mode').
- **Switching the set off**
  Press the power switch on the set to switch the TV off.
- **Selection of programmes**
  Press the respective number button 1,2, −−− 9 on the remote commander.
  In the case of two digit numbers, first press button −/−− and then the two respective number buttons.
  With the PROGR +/− buttons you can scan the programme positions (+ upwards, − downwards).
  On the Set
  Press the − button for lower programme positions and the + button for higher ones.
- **Standby mode**
  There are two possibilities to put the set into standby mode.

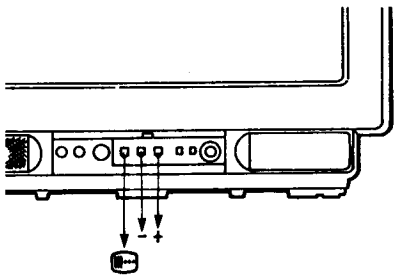
1. **Directly**
   Press the button on the remote commander. The red indicator on the set lights up.
   Note :
   Use the standby button only for short breaks. if the set will not be used for a longer time span, use the power switch to switch the set off.
2. **By using the sleep timer**
   Press the button repeatedly until the required time period is displayed on the screen (30, 60, 90 or 0 for cancelling of the operation).
   In this way you can select the time perlod after which the set switches itself automatically into standby mode.

Switching the set on out of standby mode
Press the button or one of the number buttons on the remote commander.

- **On-screen display**
  Press the button to display the programme number on the screen and press the button once more to make it disappear.
- **Selecting the signal of the connected device**
  Press the button to receive the signal of the device (e.g. a video recorder) connected at the V A connectors or the 21 -pin connector (rcar of the set).
  Press the button to return to the TV mode.

1-4. PICTURE AND SOUND ADJUSTMENTS





- **Volume**
  Press the button ◿ + to increase the volume and the button ◿ − to decrease it.

  On the set
  Press the button until ◿ is displayed on the screen and adjust the volume with the − or + button.

- **Modification of the picture presettings**
  Press the button on the commander to select either contrast, colour intensity, or brightness (the respective indication is displayed on the screen). Adjust the settings by pressing the + or − button.

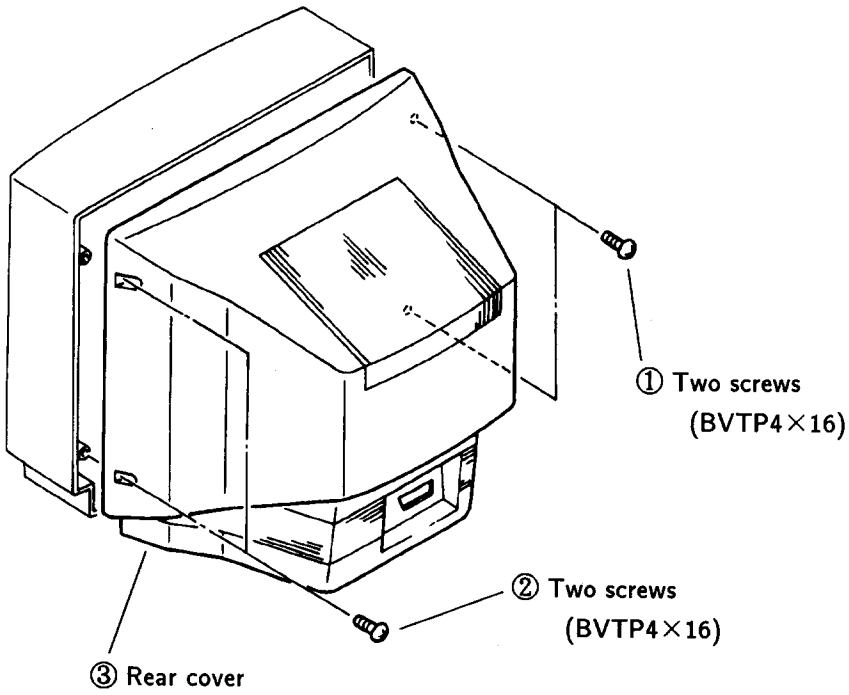
  To return to factory-set levels
  Press the reset button →•← to return to the preset picture leves.

  On the set
  Press the button in order to select the requested item (contrast, colour Intensity, brightness, and adjust with the + or − button.

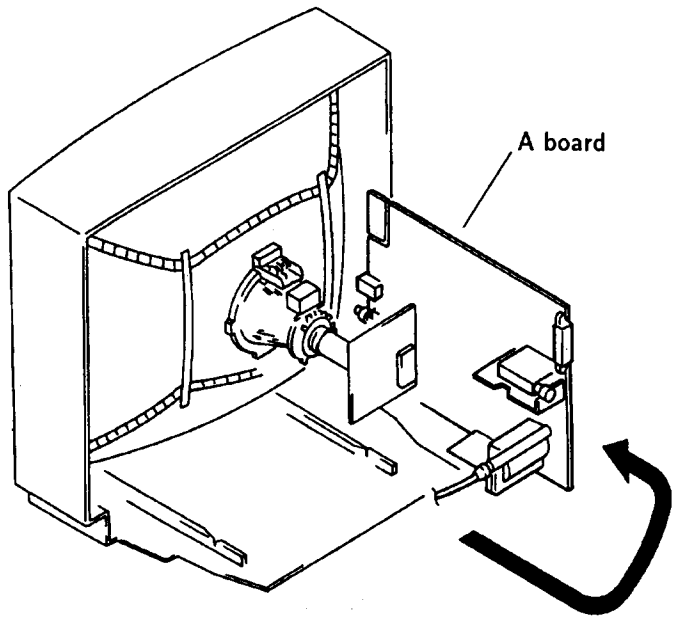
- **Muting the sound**
  Press the button to switch off the sound. Press the button again to restore the sound.

SECTION 2
DISASSEMBLY

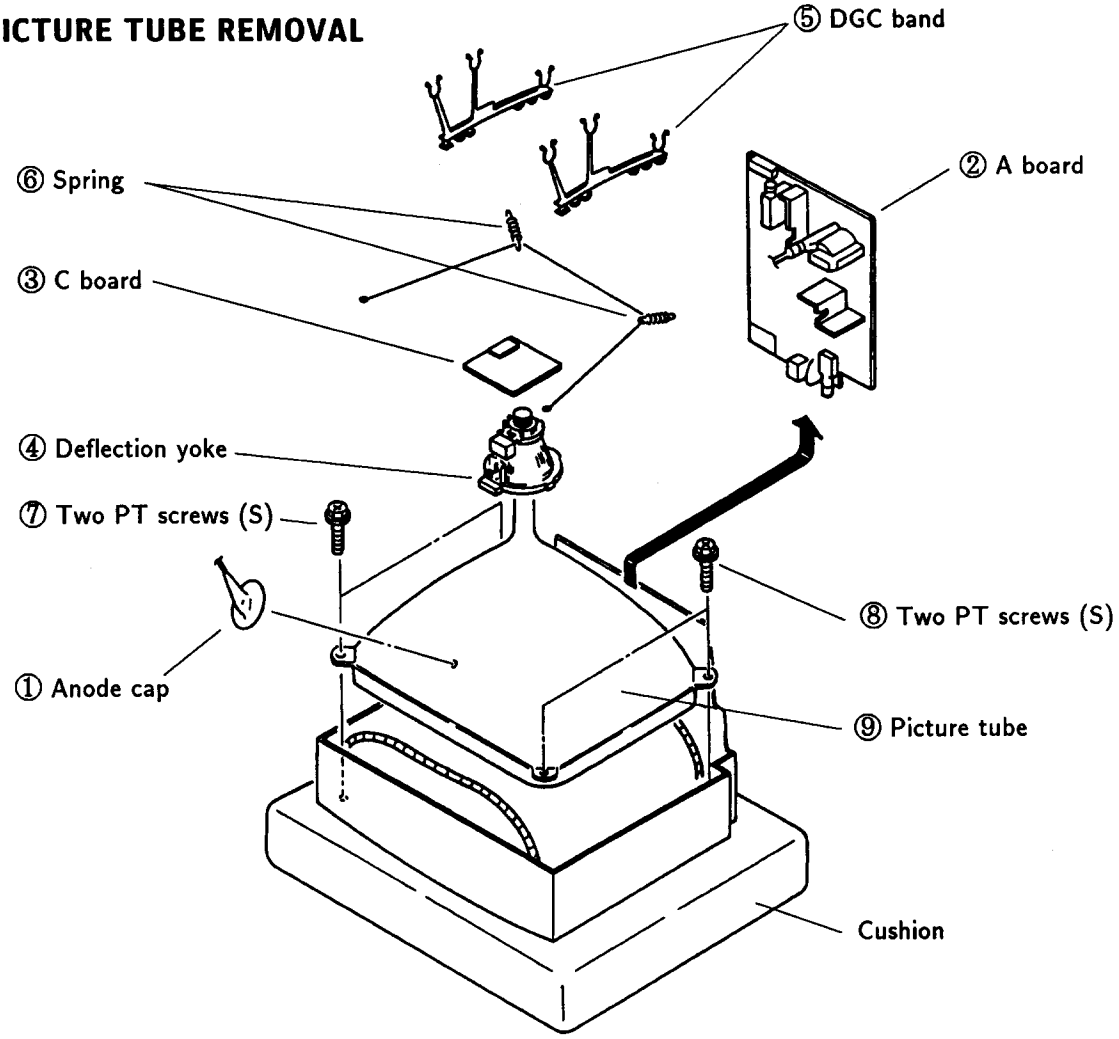
2-1. REAR COVER REMOVAL



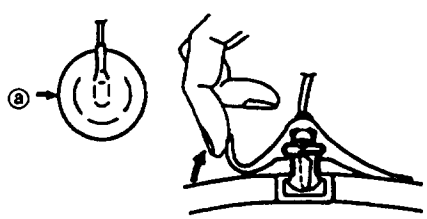
2-2. SERVICE POSITION



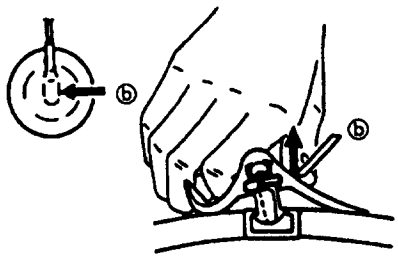
2-3. PICTURE TUBE REMOVAL



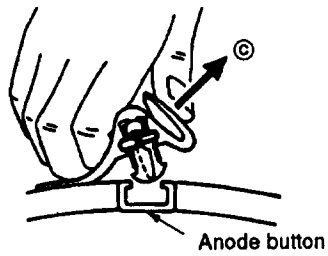
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.



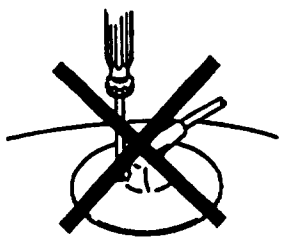
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

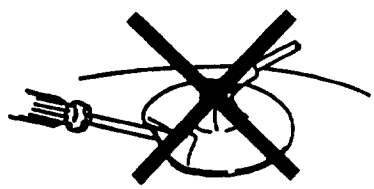
• HOW TO HANDLE AN ANODE-CAP

① Don't hurt the surface of anode-caps with sharp shaped material!

② Don't press the rubber hardly not to hurt inside of anode-caps!
A material fitting called as shatter-hook terminal is built in the rubber.

③ Don't turn the foot of rubber over hardly!
The shatter-hook terminal will stick out or hurt the rubber.





SECTION 3
SET-UP ADJUSTMENTS

● The following adjustments should be made when a complete realignment is required or a new picture tube is installed.

● These adjustments should be performed with rated power supply voltage unless otherwise noted.

The controls and switch below should be set as follows unless otherwise noted :

◑ CONTRASTcontrol ..... 80%(or Normal by commander)

☼ BRIGHTNESS control 50%

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. Focus
4. Screen (G 2) and White Balance

Note: Test Equipment Required.

1. Color bar/Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital multimeter
5. Oscilloscope

Preparation:

● Set the side of the unit with the PICTUE TUBE so that it faces east or west in order to reduce the influence of external magnetic force.

● Turn the power switch for the unit ON and erase the magnetic force using a degausser..

3-1. BEAM LANDING

Demagnetize with a degausser

1. Input a raster signal with the pattern generator.
   CONTRAST, BRIGHTNESS } normal
2. Turn the raster signal of the pattern generator to red.
3. Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides evenly. (Fig.3-1 - 3-3)
4. Move the deflection yoke forward, and adjust so that the entire screen becomes red. (Fig.3-1)
5. Switch over the raster signal to blue and green confirm the condition.
6. When the position of the deflection yoke is determined,tighten it with a deflection yoke mounting screw.
7. When landing at the corner is not right, adjust by using the disk magnets. (Fig.3-4)

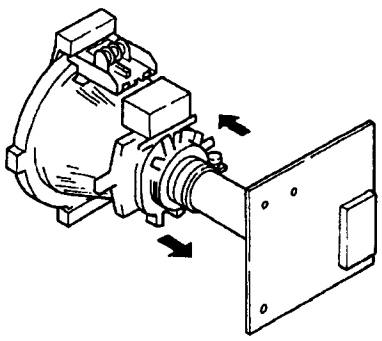


Fig.3-1

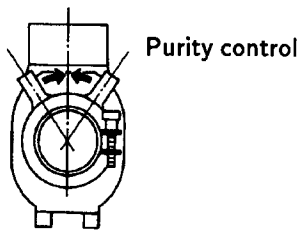


Fig.3-2

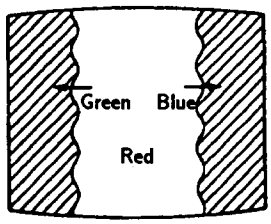


Fig.3-3

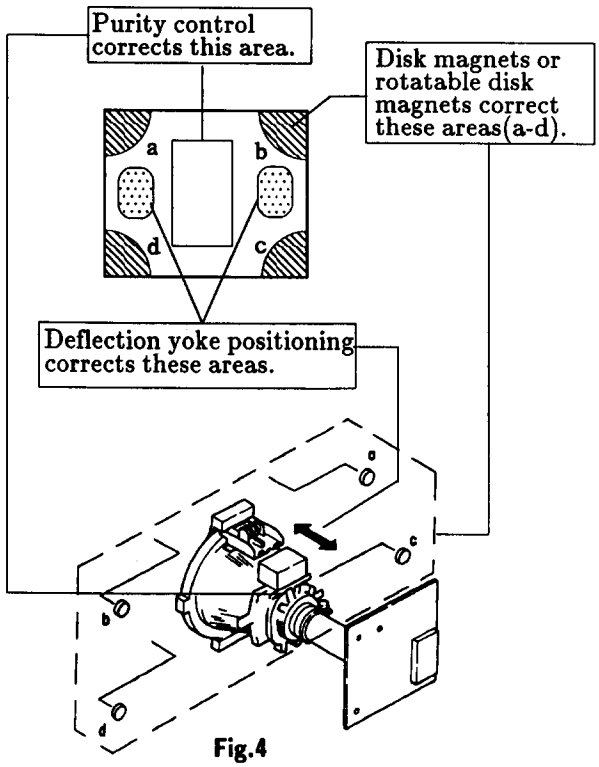


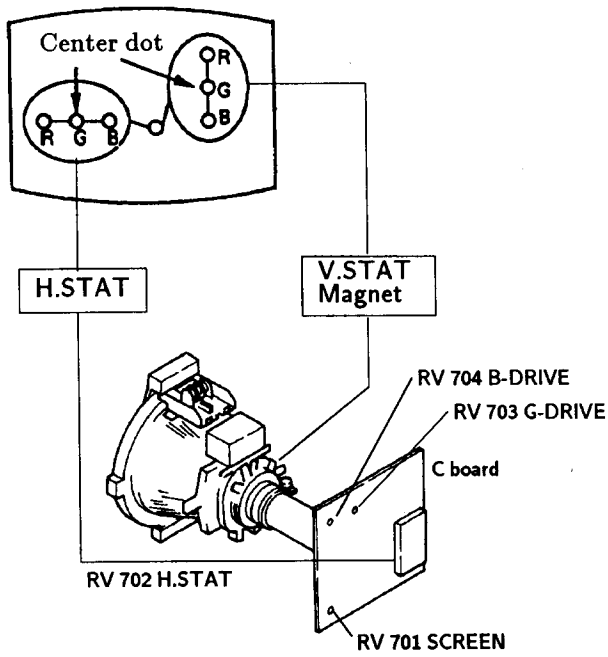
Fig.4

3-2. CONVERGENCE

Preparation:

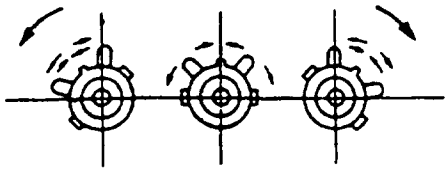
- Before starting, perform FOCUS, H.SIZE, and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Feed in the dot pattern.

(1) Horizontal and Vertical Static Convergence

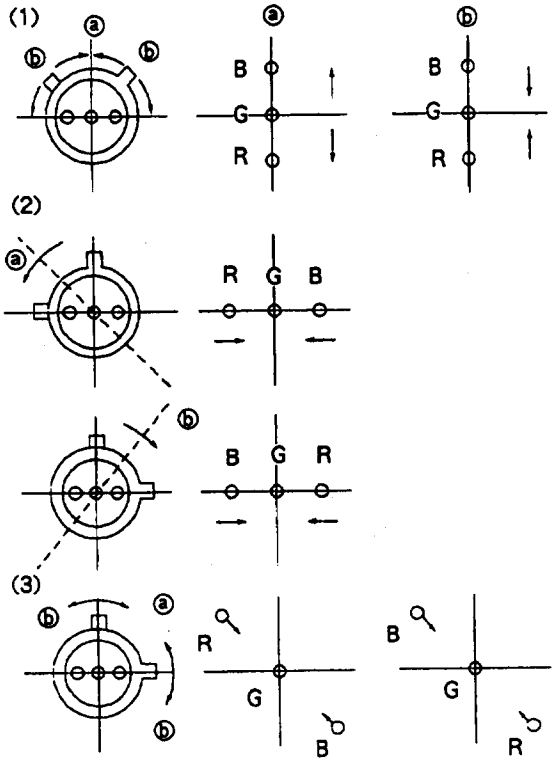


1. Adjust H.STAT VR to converge red, green and blue dots the in center of the screen.(Horizontal movement)
2. Adjust V. STAT magnet to converge red, green and blue dots in the center of the screen. (Vertical movement)
3. If the red, green and blue dots do not converge on the center of screen with H.STAT VR, perform horizontal convergence adjustment using H.STAT VR and V.STAT magnet as shown below. (In this case, H.STAT VR and V.STAT magnet effect each other.)

- Tilt the V.STAT magnet and adjust static convergence to open or close the V.STAT magnet.



4.When the V.STAT magnet is moved in the direction of arrow ⓐ and ⓑ, red, green and blue dots move as shown below.

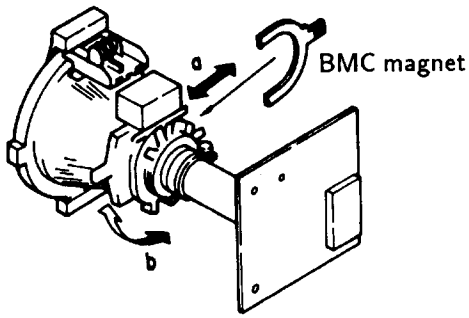


If the red and blue dot do not converge with green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H.static convergence.

Rotate BMC magnet (b) to correct insufficient V.static convergence.

In either case, repeat Beam Landing Adjustment.

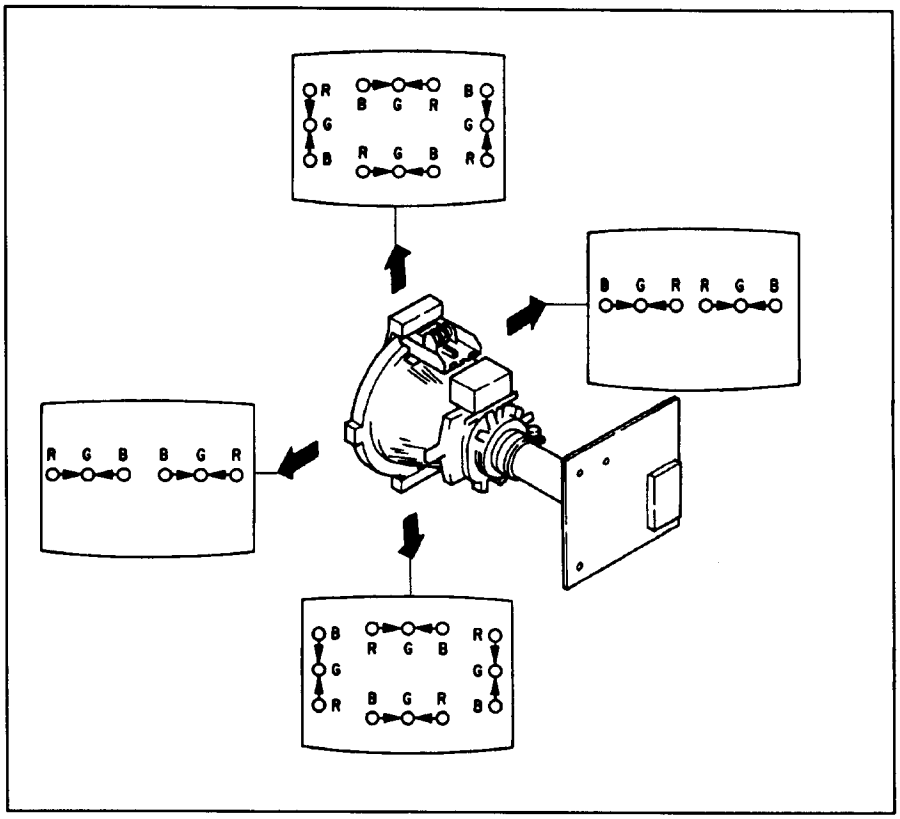


(2)Dynamic Convergence Adjustment

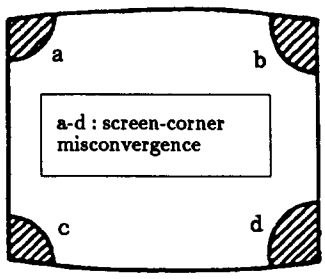
Preparation:

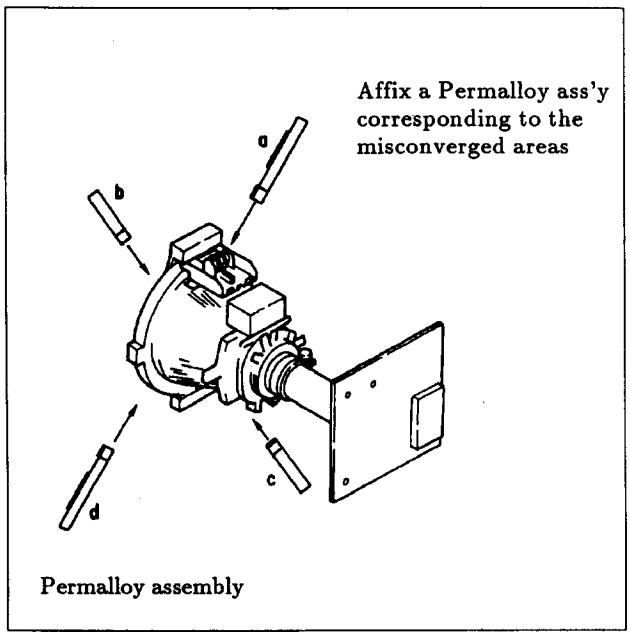
● Before starting perform Horizontal and Vertical static convergence Adjustment.

1. Slightly loosen deflection yoke screw.
2. Remove deflection yoke spacers.
3. Move the deflection yoke for best convergence as shown below.
4. Tighten the deflection yoke screw.
5. Install the deflection yoke spacers.



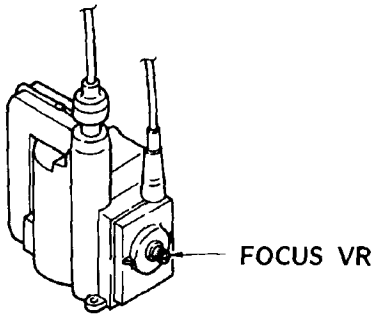
(3) Screen-corner Convergence



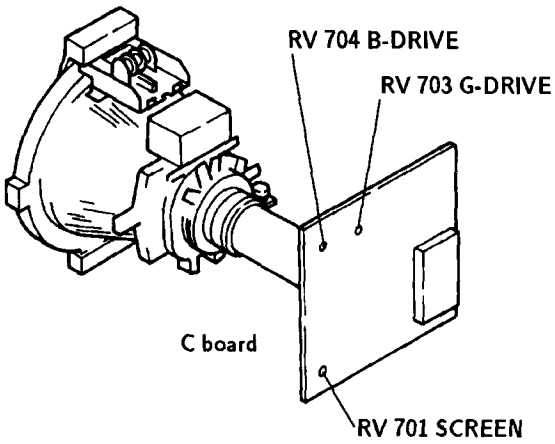


3-3. FOCUS

Adjust FOCUS so that the whole screen is in best focus.



3-4. SCREEN (G 2) and WHITE BALANCE



Screen (G 2) Setting

1. Input dot signal from the pattern generator.
2. Set the picture BRIGHTNESS control to minimum level.
3. Apply 170 V DC to the cathodes of R,G and B from an external power source.
4. While watching the picture, adjust the G2 control RV701 (SCREEN) immediately before fly-back line disappears.

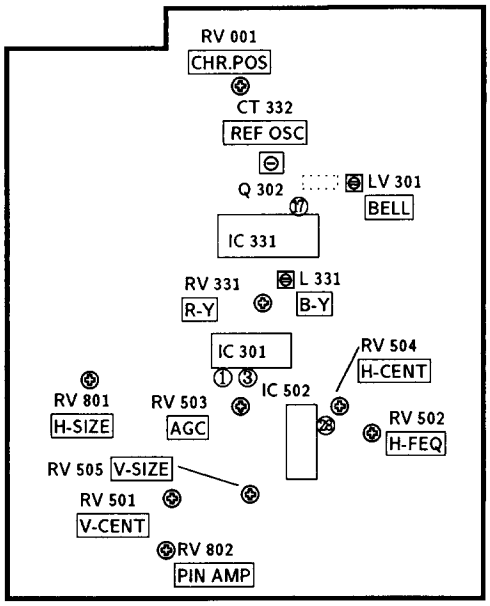
White Balance Adjustment

1. Input all-white signal from the pattern generator.
2. Adjust the BRIGHTNESS and COLOR controls to the standard level.
3. Adjust the following using RV 704 (B DRIVE) and RV 703 (G DRIVE)

In the following adjustments, the CONTRAST, COLOR and BRIGHTNESS controls are set to normal unless otherwise specified.

SECTION 4
CIRCUIT ADJUSTMENTS

4-1. A BORAD ADJUSTMENTS

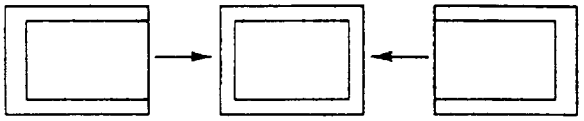


A BOARD
-Component side-

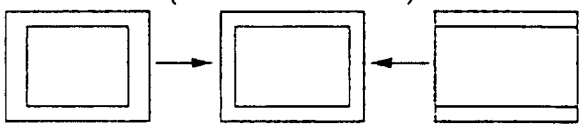
TU AGC Adjustment (RV 503)

1. Tune in air signal.
2. Adjust AGC VR (RV 503) so that snow-noise and cross-modulation just disappear from the picture.

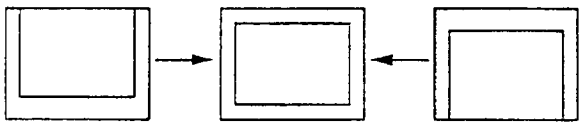
RV 504 H.CENT (HORIZONTAL CENTER)



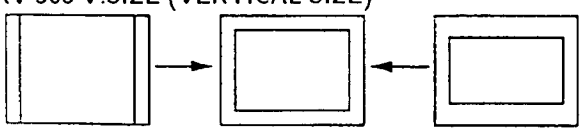
RV 801 H.SIZE (HORIZONTAL SIZE)



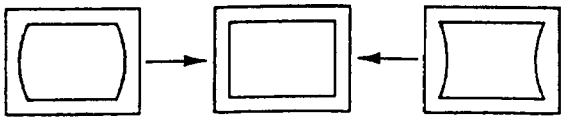
RV 501 V.CENT (VERTICAL CENTER)



RV 505 V.SIZE (VERTICAL SIZE)

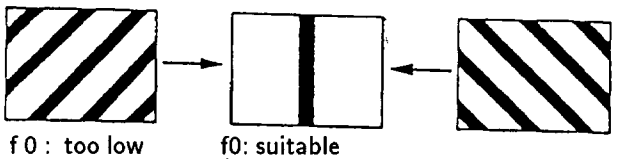


RV 802 PIN AMP (PINCUSHION AMPLIFIER)



H.FREQ Adjustment (RV 502)

1. Input a PAL COLOR BAR signal, then connect an electrolytic capacitor (100 μ/16 V) between pin㉘ and GND of IC 502.
2. Adjust RV 502 (H.FREQ) to stop scrolling of the picture in the horizontal direction.
3. After adjustment, remove the electrolytic capacitor.

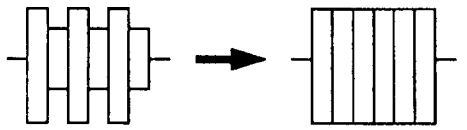


REF OSC 8.8 MHz Adjustment (CT 332)

1. Input a PAL COLOR BAR pattern.
2. Short circuit between pin⑰ of IC 331 and ground.
3. Adjust CT 332 to obtain color synchronizetion.
4. Remove the jumper wire from IC 331.

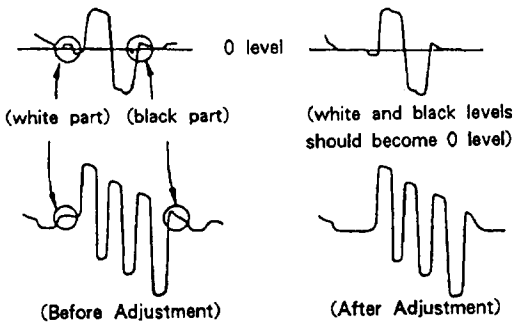
BELL FILTER Adjustment (LV 301)

1. Input a SECAM COLOR BAR pattern.
2. Connect an oscilloscope to rhe Q 302 emitter.
3. Adhust LV 301 so that waveform becomes flat.



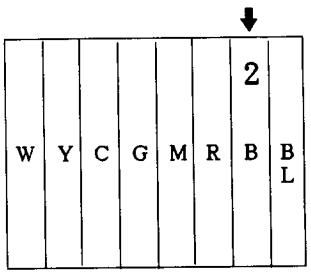
SECAM DISCRI Adjustment (RV 331 R-Y L 331 B-Y)

1. Input a SECAM COLOR BAR pattern.
2. Connect an oscilloscope to pin ① of IC 301.
3. Adjust RV 331(R-Y) so that white and black parts of the waveform of pin ① becomes 0 lecel.
4. Connect an oscilloscope to pin ③ of IC 301.
5. Adjust L 331(B-Y) so that white and black parts of the waveform of pin ③ becomes 0 level.



CHARACTER POSITION Adjustment (RV 001)

1. Input PAL COLOR BAR pattern.
2. Adjust RV 001 to position the charcter display at the point indicated by the arrow below.



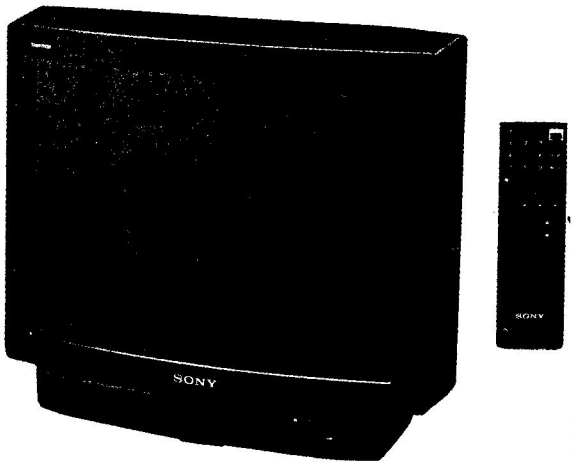
KV-M2140K/M2141K

RM-694

SERVICE MANUAL

OIRT Model

KV-M2140K
Chassis No. SCC-E50B-A
KV-M2141K
Chassis No. SCC-E50A-A



BE-2A CHASSIS

MODELS OF THE SAME SERIES	
KV-M2140K/M2141K	

SPECIFICATIONS

【KV-M2140K/M2141K】

Television system	B/G/H/D/K
Color system	PAL/SECAM
Channel coverage	B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV : S1-S20 D/K VHF : R1-R12 UHF : R21-R60
Picture tube	Black Trinitron tube 90° degree deflection Approx. 54.5 cm (21 inches) (Approx.51.0cm picture measured diagonally)
Inputs	21-pin connector : CENELEC standard Including RGB input Audio/Video input jacks : phono jacks S-Video input
Outputs	21-pin connector : CENELEC standard Headphones jack : minijack
Sound output	5 W (Music)
Power consumption	70.5Wh (KV-M2140K) 73.5Wh (KV-M2141K)
Dimensions	Approx. 513x475x487 mm (w/h/d)
Weight	Approx. 24.9 kg

【RM-694】

Remote control system	infrared control
Power requirements	3V dc 2 batteries IEC designation R6 (size AA)
Dimensions	Approx. 55×18×185mm (w/h/d)
Weight	Approx. 100g including batteries
Accessories supplied	IEC designation R6 batters (2)
Supplied accessories	RM-694 Remote Commander (1) IEC designation R6 batteries (2)

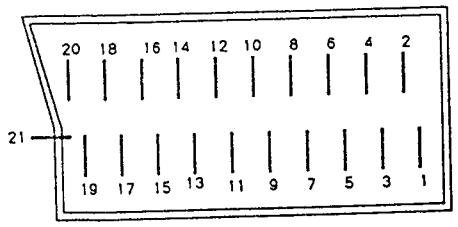
Design and specifications are subject to change without notice.

MICROFILM

TRINITRON® COLOR TV

SONY®

21-pin Euro Connector Configuration



PIN	SIGNAL	SPECIFICATION
1	Audio output	0.5Vrms/1kilohm or less
2	Audio input	0.5Vrms/10kilohms or more
3	Audio output	0.5Vrms/1kilohm or less
4	Earth (audio)	
5	Earth (B-input)	
6	Audio input	0.5Vrms/10kilohms or more
7	B-input	0.7Vp-p/75ohms
8	Function switching	9.5V to 12V
9	Earth (G-input)	
10		
11	G-input	0.7Vp-p/75ohms
12		
13	Earth (R-input)	
14	Earth (blanking)	
15	R-input	0.7Vp-p/75ohms
16	Fast blanking	1V to 3V/75ohms
17	Earth (video)	
18	Earth (fast blanking)	
19	Video output	1Vp-p/75ohms
20	Video input	1Vp-p/75ohms
21	Screening plug	

4 pin connector (S-)

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB 75ohm, positive Sync 0.3V $^{+3}_{0}$ dB
4	C (S signal) input	0.3V ± 3dB 75ohm positive

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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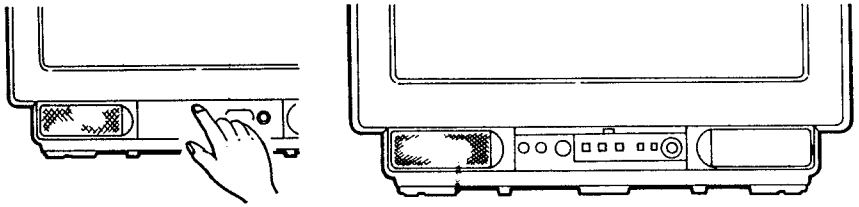
Note) The layout, etc., will be slightly different from the operating instructions packed with the units.

SECTION 1
GENERAL

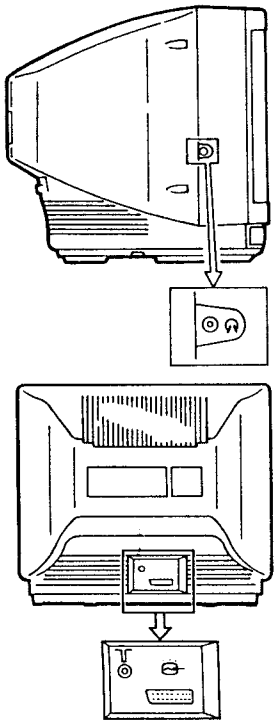
1-1. INDEX OF THE PARTS

In the following you will find a short description of the parts and their function on the set or on the remote commander using the respective symbols. For more details reter to the page number given in the index.

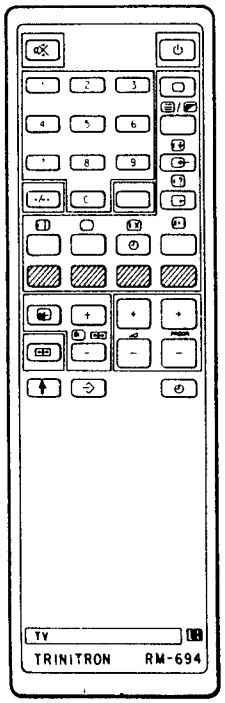
TV Set — Front



TV Set — Rear



Remote Commander



TV set

Symbol	Function
∩	Headphones jack (mini-jack)
V	Video input jack
A	Audio input jack
+/−	Buttons for Sound and picture adjustment
+/−	Programme scanning buttons
	S-video input jack
	Standby indicator
	Power switch
	Aerial socket (rear of the set)
	21-Pin connector (rear of the set)

Remote Commander

Symbol	Function
	Mute button
1−9, 0, −/−−	Number buttons − in case of two digit numbers first press button −/−− and then two number buttons
	Button has no function
	Select button for picture adjustment item
+/−	Buttons for adjustment picture items
↑ and +/−	Buttons for manual fine tuning of a channel
→ • ←	Button for resetting the picture adjustment items to standard
C	Button for clearing a programme position (in preset mode)
↑	Functions only in combination with other buttons
and ↑	Preset mode on/off buttons
	Buttons for switching the TV set into standby mode
	Used to return to TV-mode from stadby and video input modes
	Button for selecting the video input mode
	On/off button for onscreen display
PROGR +/−	Programme scanning butlons
+/−	Buttons for adjusting the volume
	Button for activating the sleep timer

Note Buttons not referred to in this index have no function.

1-2. TO PRESET CHANNELS

The control buttons to preset channels are located on the Remote Commander. (Up to 60 programme positions are at your disposal.)

1 Press the power switch on the set to switch it on.

2 Press both the ↑ (shift) button and the (preset) button simultaneously. You are now in the preset mode.

3 Use either button PROGR + (upwards) or PROGR − (downwards) to select the required programme position.

4 Press both the ↑ button and the + or − button repeatedly until the desired TV station is found.

5 Repeat steps 3 and 4 for all other channels.

6 Press once more both the ↑ button and the (preset) button in order to return to the TV mode and to store the channels.

Skipping of programme positions

Using both the button C and the ↑ button you have the possibility to skip unused programme positions (e.g. without a stored station) when pressing the PROGR +/− buttons.

1 Press both the ↑ button and the (preset) button to select the preset mode.

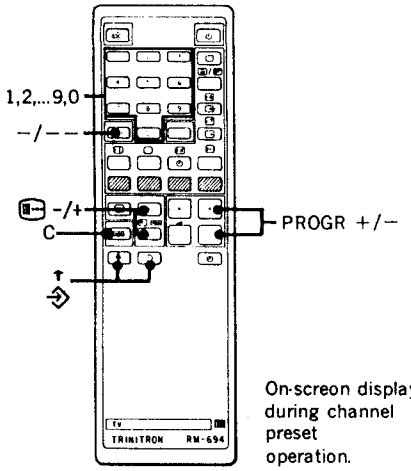
2 Select the programme position to be skipped by pressing the + or − PROGR button.

3 Press the C button.

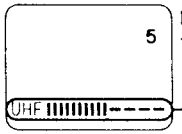
4 Prees both the (preset) button and the ↑ button to return to the TV mode.

Manual Fine Tuning

If the reception of a channel is not satisfactory you have the possibility to deactivate the Automatic Fine Tuning which usually tunes in the best possible picture during presetting.
Press both the ↑ button and the + or − button to fine ture the channel. By pressing the respective programme number the automatic Fine Tuning will be restored.

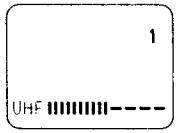


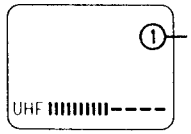
On-screen display during channel preset operation.



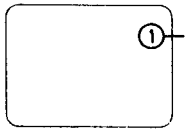
Programme position flashes.

Indicates the approximate location in the band of the channel being tuned in.





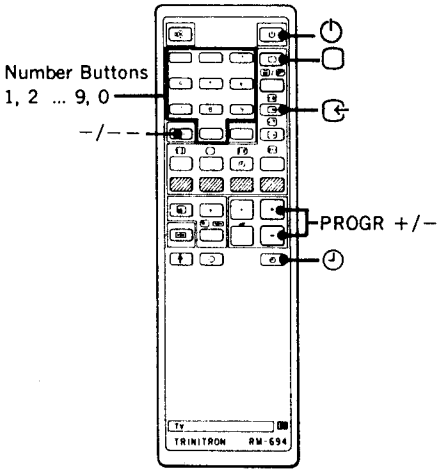
Programme number stops flashing.

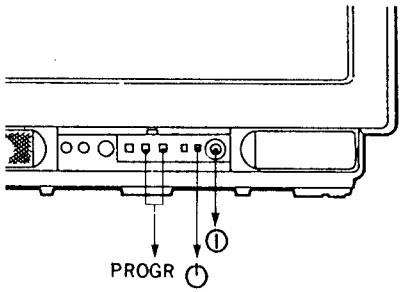


On-screen display after presetting.

1-3. DAILY USE OF THE TV

Your TV set is supposed to be operated with the Remote Commander, for the basic functions however it is also possible to use the buttons on the set itself.





- **Switching the set on**
  Press the power switch on the set to switch the TV on. if the set is switched on. the green indicator on the set lights up, if it is in standby mode the red indicator lights up (see also 'Standby mode').
- **Switching the set off**
  Press the power switch on the set to switch the TV off.
- **Selection of programmes**
  Press the respective number button 1,2, −−− 9 on the remote commander.
  In the case of two digit numbers, first press button −/−− and then the two respective number buttons.
  With the PROGR +/− buttons you can scan the programme positions (+ upwards, − downwards).
  On the Set
  Press the − button for lower programme positions and the + button for higher ones.
- **Standby mode**
  There are two possibilitles to put the set into standby mode.

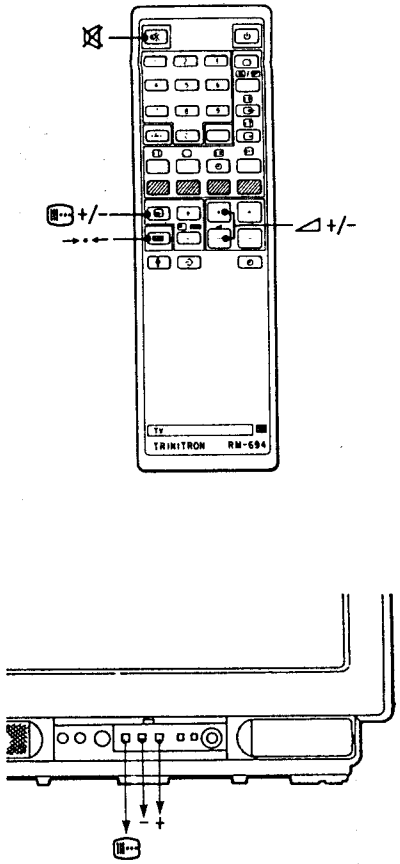
1. **Directly**
   Press the button on the remote commander. The red indicator on the set lights up.
   Note :
   Use the standby button only for short breaks. if the set will not be used for a longer time span, use the power switch to switch the set off.
2. **By using the sleep timer**
   Press the button repeatedly until the required time period is displayed on the screen (30, 60, 90 or 0 for cancelling of the operation).
   In this way you can select the time perlod after which the set switches itself automaticaily into standby mode.

Switching the set on out of standby mode

Press the button or one of the number buttons on the remote commander.

- **On-screen display**
  Press the button to display the programme number on the screen and press the button once more to make (only for KV-M2141K) it disappear.
- **Time feature (KV-M2141K only)**
  In TV-mode. if teletext is broadcast on the selected channel, press the button to display the current time.
- **Selecting the signal of the connected device**
  Press the button to receive the signal of the device (e.g. a video recorder) connected at the V A connectors or the 21 -pin connector (rcar of the set).
  Press the button to return to the TV mode.

1-4. PICTURE AND SOUND ADJUSTMENTS



- **Volume**
  Press the button ◿+ to increase the volume and the button ◿− to decrease it.

  On the set
  Press the button until ◿ is displayed on the screen and adjust the volume with the − or + button.

- **Modification of the picture presettings**
  Press the button on the commander to select either contrast, colour intensity, or brightness (the respective indication is displayed on the screen). Adjust the settings by pressing the + or − button.

  To return to factory-set leveis
  Press the reset button → • ← to return to the preset picture leves.

  On the set
  Press the button in order to select the requested item (contrast, colour Intensity, brightness, and adjust with the + or − button.

- **Muting the sound**
  Press the button to switch off the sound. Press the button again to restore the sound.

1-5. VIEWING TELETEXT (KV-M2141K only)

To view the teletext service, use the Remote Commander. RM−694 has teletext buttons indicated in green teletext operation are indicated in green.

Operation

1 Select the TV channel for the desired teletext service.
2 Press (TEXT/MIX) to display the teletext service.
  Once has been pressed, the TV channel cannot be changed.
3 Key in the three digits for the desired page using the number buttons. If an error is made, complete the three digit sequence by keying in any digit. Then re-enter the correct page number. The requested teletext page is displayed.

To return to the TV mode, press TV on the Remote Commander.

The teletext service can be displayed directly from the standby mode, by pressing .

To receive the teletext service of a different TV channel.
1 Press TV to return to the TV mode.
2 Select the desired TV channel.
3 Press .

To display the index page.
Press (INDEX). If the necessary signal is not being broadcast, page 100 is displayed.

To access the next or preceding page
Press (PAGE+) or (PAGE−).
These buttons are indicated in white on the Commander.

To superimpose the teletext display on the TV picture.
Press twice from TV mode.
Press again to return to the TEXT display.

To suppress the teletext display so that the TV picture is displayed.
Press (TEXT CL). This button can be operated from both the TEXT and MIX displays.

To prevent a teletext page (subpage) from being updated /changed.
Press HOLD. The HOLD symbol "" appears at the top left of the screen.

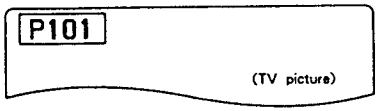
To resume normal teletext reception, press .

To enlarge the teletext display.
Press . Press once to enlarge the upper half of the display: press again to enlarge the lower half of the display ; press again to return to the normal display.

To reveal concealed infomation such as the answers to a quiz
Press (REVEAL)
Press again to conceal the answers.

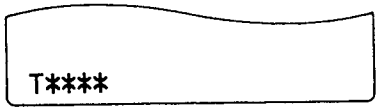
To adjust the contrast of the teletext display.
Press + or − button.

To watch the TV program while waiting for a requested page to be displayed.
1 Request the new page.
2 Press to watch the TV program. The requested page number appears at the top left of the screen.
  When the requested page has been found, the page number is displayed on the top left hand corner of the screen.

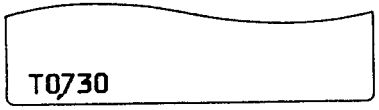


To view this page, press .

To have a requested page displayed at a pre-determined time.
1 Request a time coded page (e. g. alarm page).
2 Press (TP ON).
  "T＊＊＊＊" will appear at the bottom of the screen.



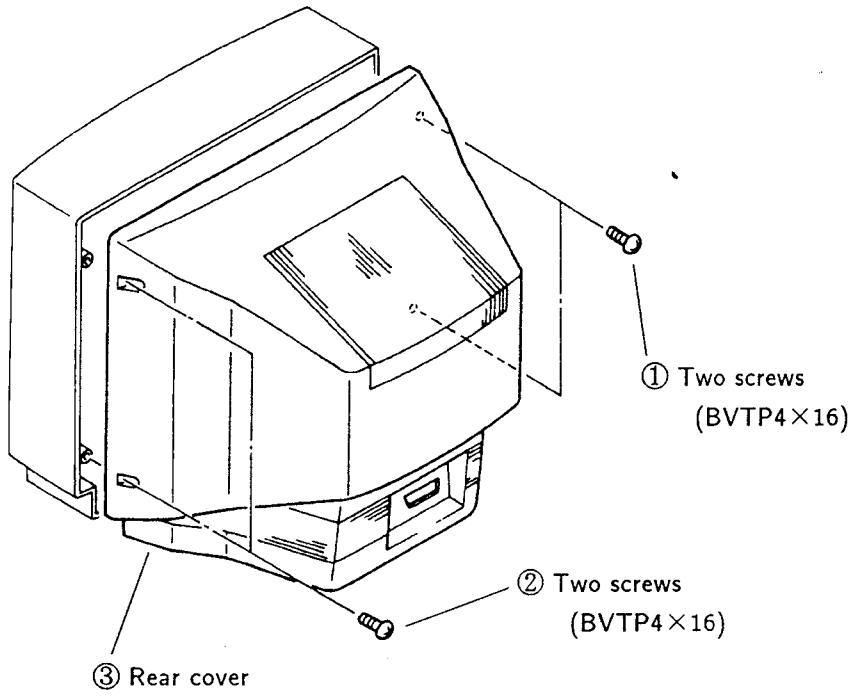
3 Enter your request time with the number buttons, using four digits. For example, 07 : 30.



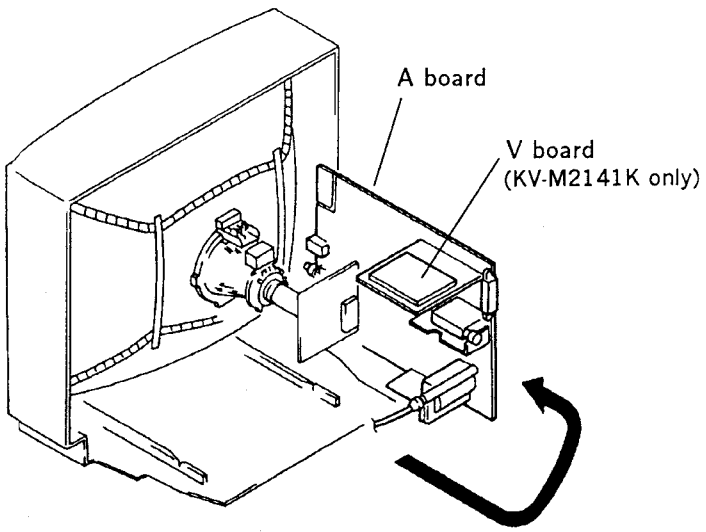
To watch the TV program until the requested time, press .
At the requested time, the page number will be displayed at the top of the screen.
To view this page, press .
To cancel the request, first ensure that the teletext page is displayed, then press (TP OFF).

SECTION 2
DISASSEMBLY

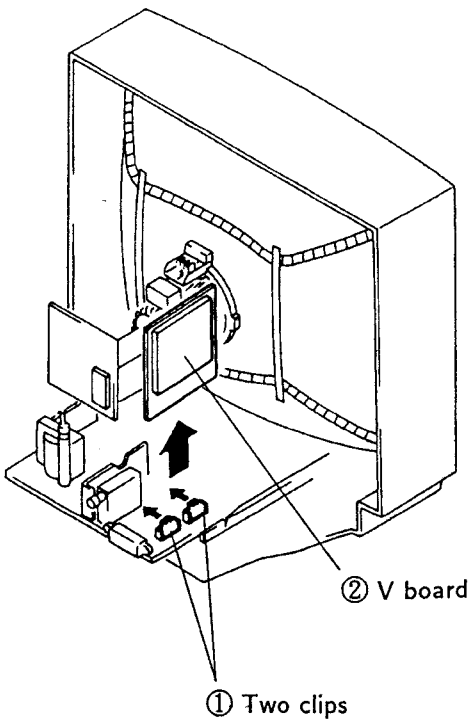
2-1. REAR COVER REMOVAL



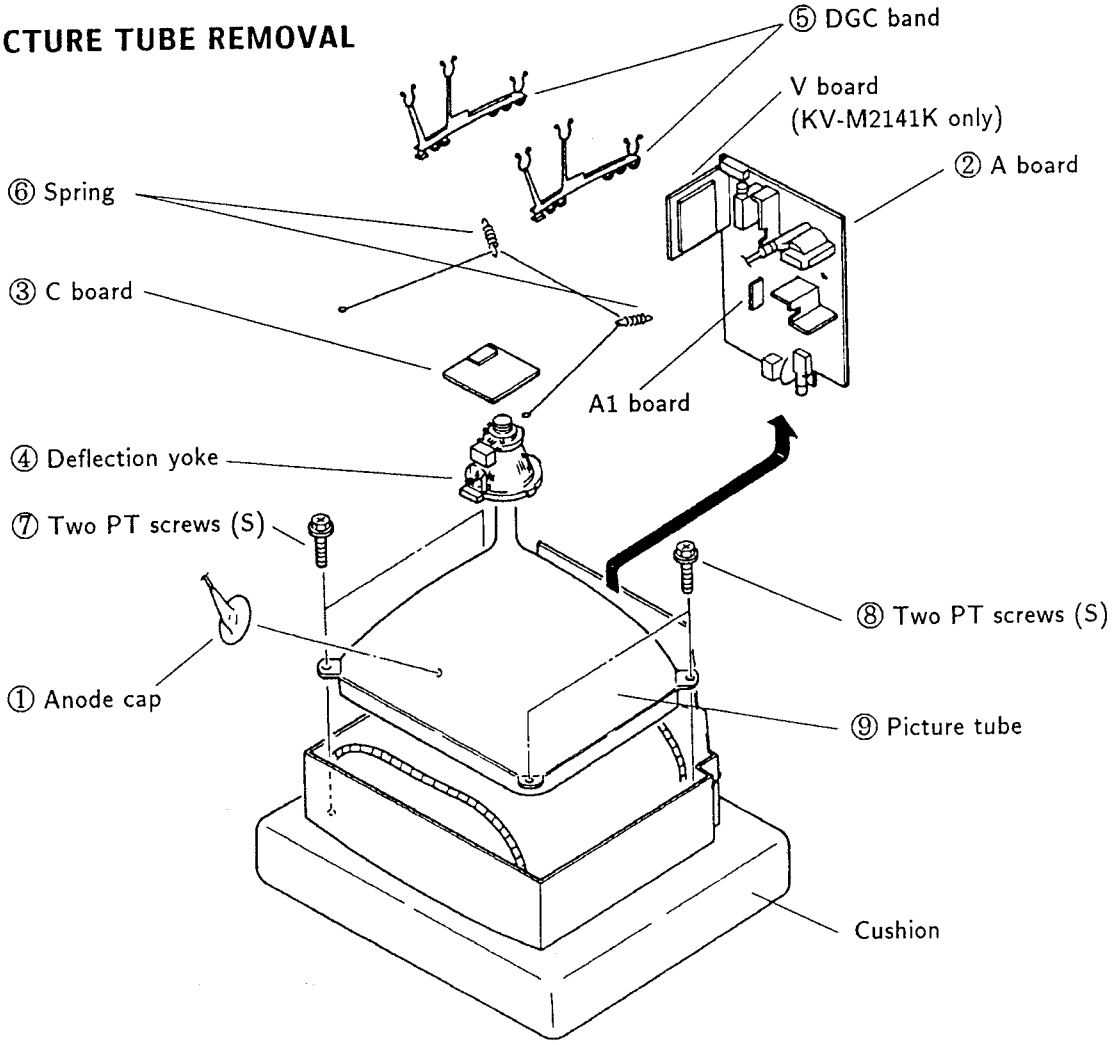
2-2. SERVICE POSITION



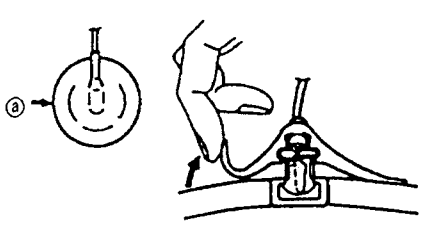
2-3. V BOARD REMOVAL (KV-M2141K only)



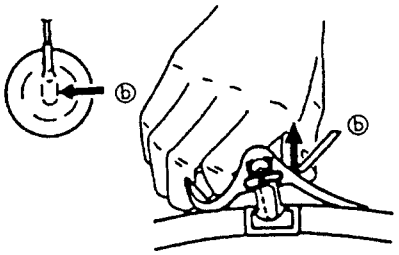
2-4. PICTURE TUBE REMOVAL



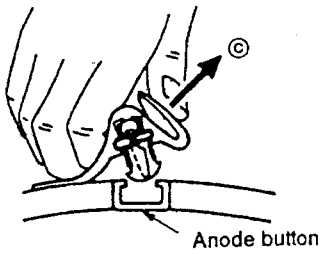
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.



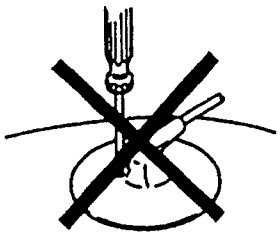
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

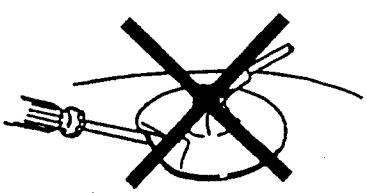
• HOW TO HANDLE AN ANODE-CAP

① Don't hurt the surface of anode-caps with sharp shaped material!

② Don't press the rubber hardly not to hurt inside of anode-caps!
A material fitting called as shatter-hook terminal is built in the rubber.

③ Don't turn the foot of rubber over hardly!
The shatter-hook terminal will stick out or hurt the rubber.





SECTION 3
SET-UP ADJUSTMENTS

● The following adjustments should be made when a complete realignment is required or a new picture tube is installed.

● These adjustments should be performed with rated power supply voltage unless otherwise noted.

The controls and switch below should be set as follows unless otherwise noted :

◑ CONTRASTcontrol ..... 80%(or Normal by commander)

☼ BRIGHTNESS control 50%

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. Focus
4. Screen (G 2) and White Balance

Note: Test Equipment Required.

1. Color bar/Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital multimeter
5. Oscilloscope

Preparation:

● Set the side of the unit with the PICTUE TUBE so that it faces east or west in order to reduce the influence of external magnetic force.

● Turn the power switch for the unit ON and erase the magnetic force using a degausser..

3-1. BEAM LANDING

Demagnetize with a degausser

1. Input a raster signal with the pattern generator.
   CONTRAST
   BRIGHTNESS } normal
2. Turn the raster signal of the pattern generator to red.
3. Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides evenly. (Fig.3-1 - 3-3)
4. Move the deflection yoke forward, and adjust so that the entire screen becomes red. (Fig.3-1)
5. Switch over the raster signal to blue and green confirm the condition.
6. When the position of the deflection yoke is determined,tighten it with a deflection yoke mounting screw.
7. When landing at the corner is not right, adjust by using the disk magnets. (Fig.3-4)

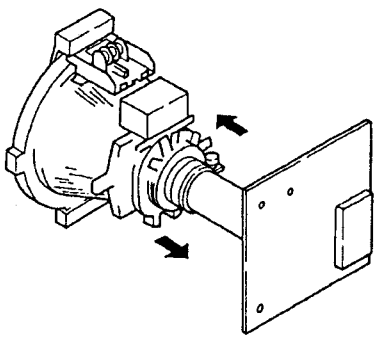


Fig.3-1

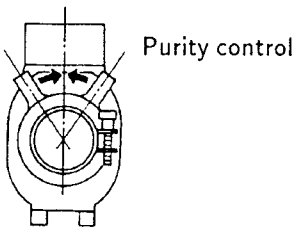


Fig.3-2

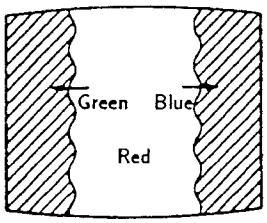
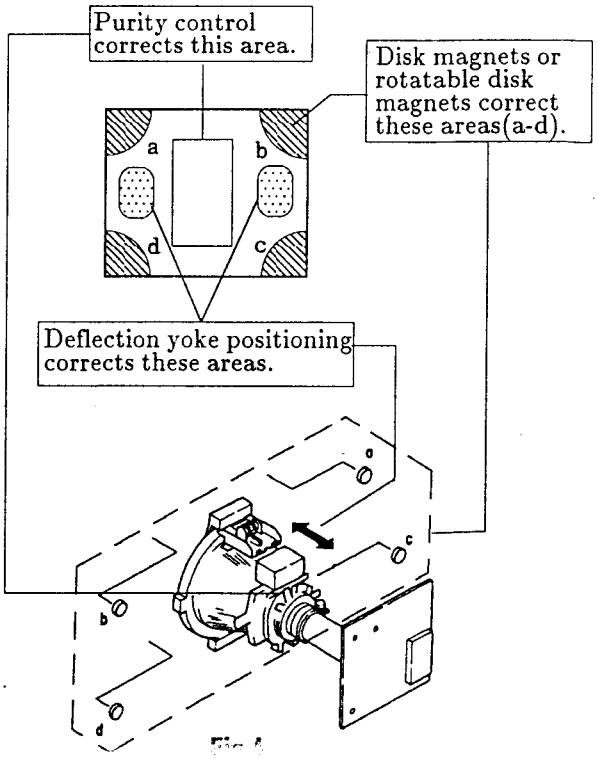


Fig.3-3

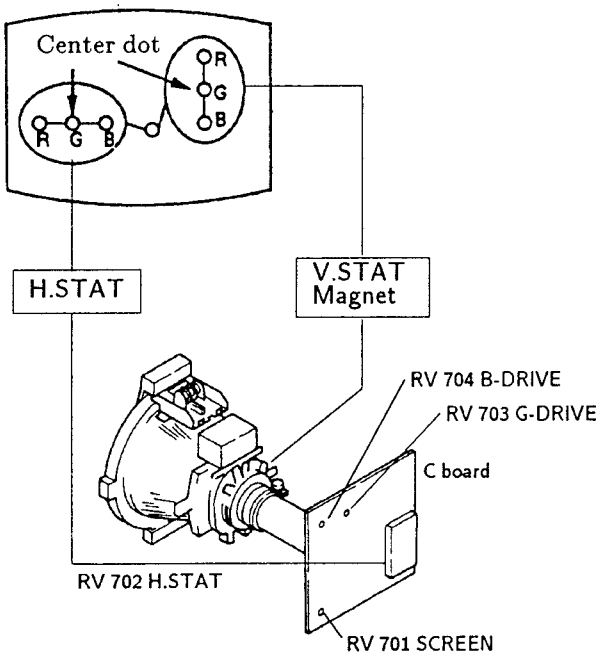


3-2. CONVERGENCE

Preparation:

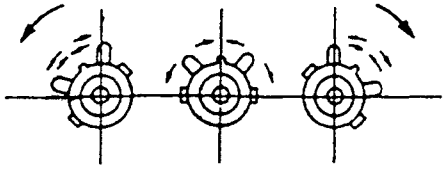
- Before starting, perform FOCUS, H.SIZE, and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Feed in the dot pattern.

(1) Horizontal and Vertical Static Convergence

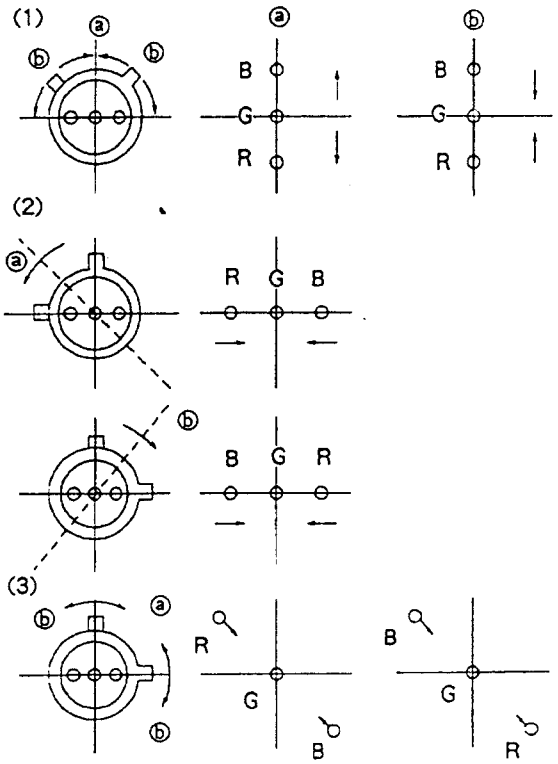


1. Adjust H.STAT VR to converge red, green and blue dots the in center of the screen.(Horizontal movement)
2. Adjust V. STAT magnet to converge red, green and blue dots in the center of the screen. (Vertical movement)
3. If the red, green and blue dots do not converge on the center of screen with H.STAT VR, perform horizontal convergence adjustment using H.STAT VR and V.STAT magnet as shown below. (In this case, H.STAT VR and V.STAT magnet effect each other.)

- Tilt the V.STAT magnet and adjust static convergence to open or close the V.STAT magnet.



4.When the V.STAT magnet is moved in the direction of arrow ⓐ and ⓑ, red, green and blue dots move as shown below.

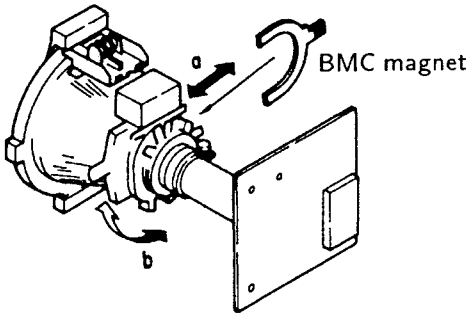


If the red and blue dot do not converge with green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H.static convergence.

Rotate BMC magnet (b) to correct insufficient V.static convergence.

In either case, repeat Beam Landing Adjustment.

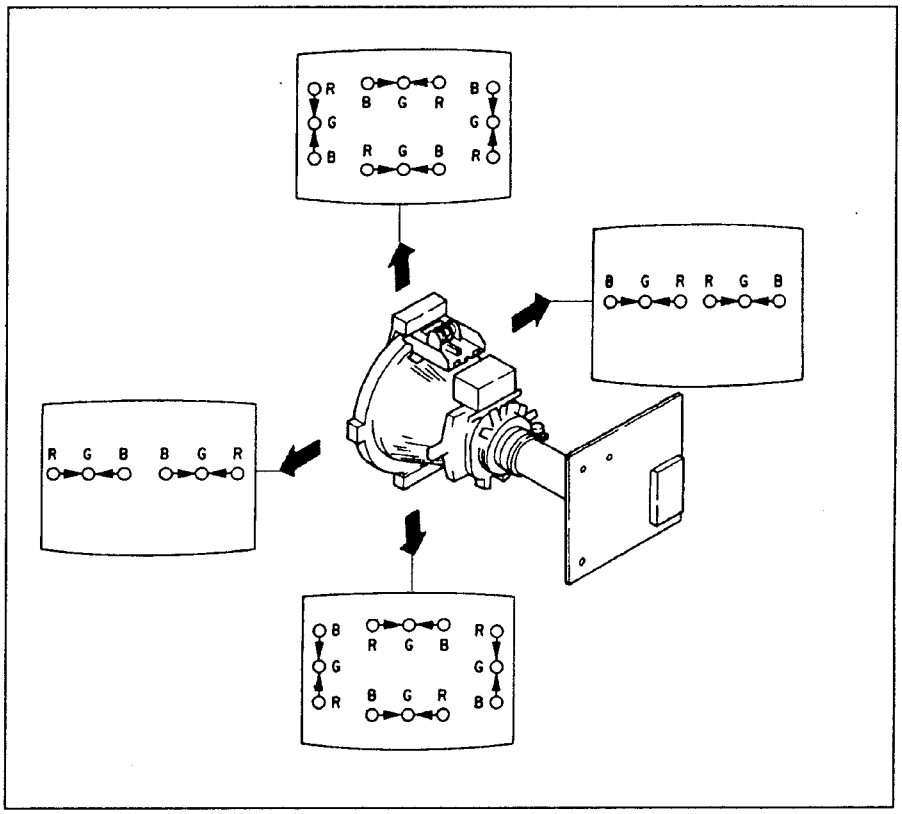


(2)Dynamic Convergence Adjustment

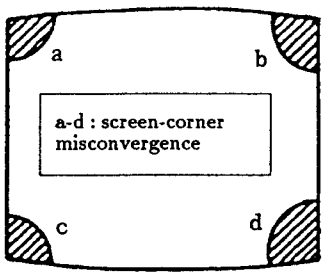
Preparation:

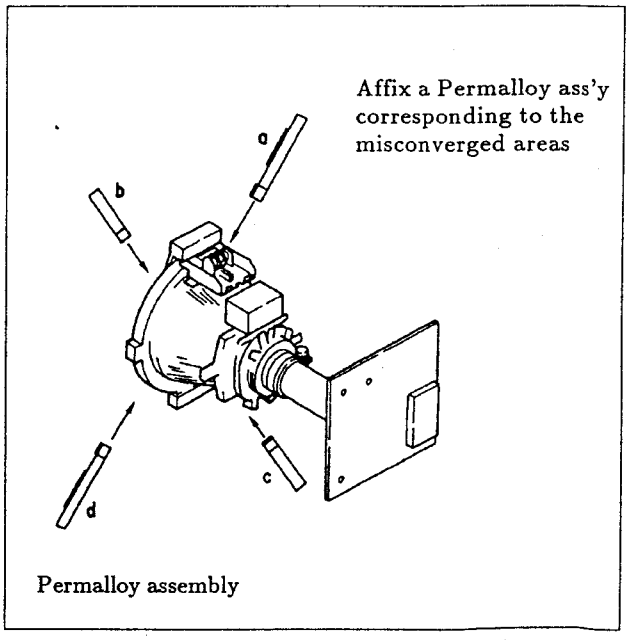
● Before starting perform Horizontal and Vertical static convergence Adjustment.

1. Slightly loosen deflection yoke screw.
2. Remove deflection yoke spacers.
3. Move the deflection yoke for best convergence as shown below.
4. Tighten the deflection yoke screw.
5. Install the deflection yoke spacers.



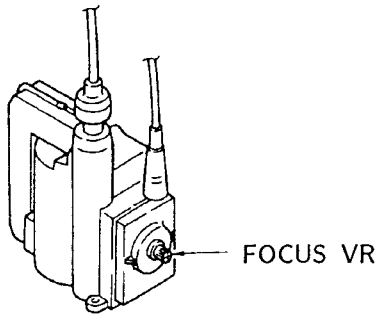
(3) Screen-corner Convergence



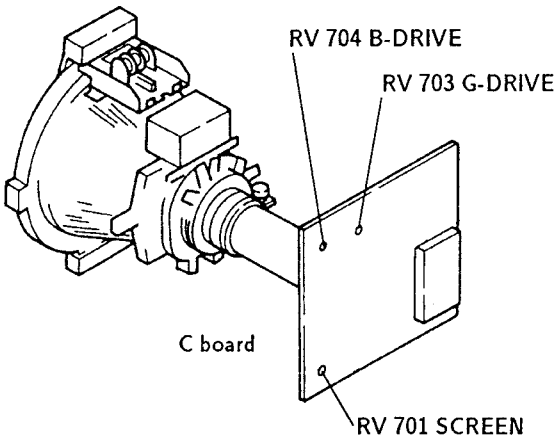


3-3. FOCUS

Adjust FOCUS so that the whole screen is in best focus.



3-4. SCREEN (G 2) and WHITE BALANCE



Screen (G 2) Setting

1. Input dot signal from the pattern generator.
2. Set the picture BRIGHTNESS control to minimum level.
3. Apply 170 V DC to the cathodes of R,G and B from an external power source.
4. While watching the picture, adjust the G2 control RV701 (SCREEN) immediately before fly-back line disappears.

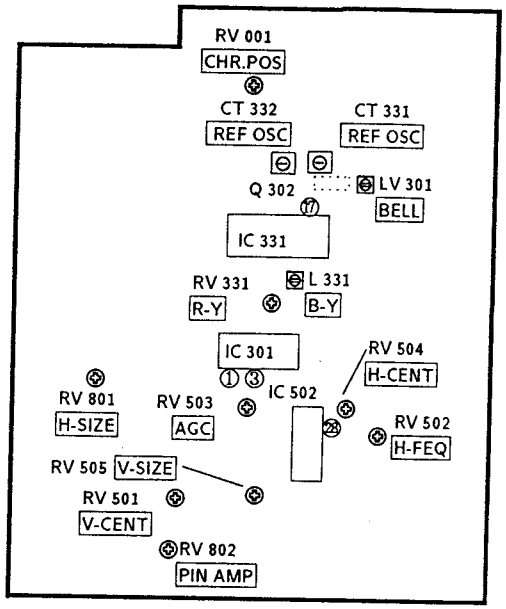
White Balance Adjustment

1. Input all-white signal from the pattern generator.
2. Adjust the BRIGHTNESS and COLOR controls to the standard level.
3. Adjust the following using RV 704 (B DRIVE) and RV 703 (G DRIVE)

In the following adjustments, the CONTRAST, COLOR and BRIGHTNESS controls are set to normal unless otherwise specified.

SECTION 4
CIRCUIT ADJUSTMENTS

4-1. A BORAD ADJUSTMENTS

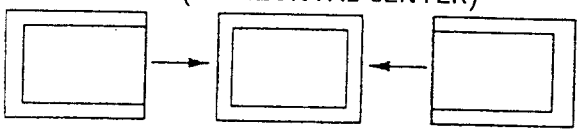


A BOARD
-Component side-

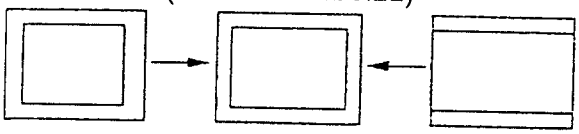
TU AGC Adjustment (RV 503)

1. Tune in air signal.
2. Adjust AGC VR (RV 503) so that snow-noise and cross-modulation just disappear from the picture.

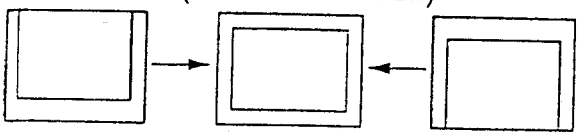
RV 504 H.CENT (HORIZONTAL CENTER)



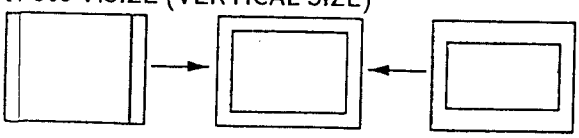
RV 801 H.SIZE (HORIZONTAL SIZE)



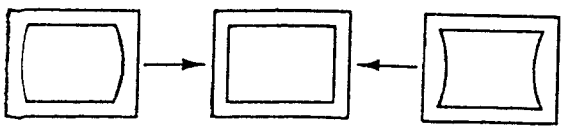
RV 501 V.CENT (VERTICAL CENTER)



RV 505 V.SIZE (VERTICAL SIZE)

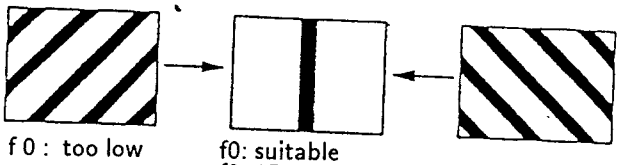


RV 802 PIN AMP (PINCUSHION AMPLIFIER)



H.FREQ Adjustment (RV 502)

1. Input a PAL COLOR BAR signal, then connect an electrolytic capacitor (100 μ/16 V) between pin㉘ and GND of IC 502.
2. Adjust RV 502 (H.FREQ) to stop scrolling of the picture in the horizontal direction.
3. After adjustment, remove the electrolytic capacitor.



f 0 : too low

f0: suitable
f0: 15.625±50Hz

f 0 : too high

REF OSC 7.16 MHz Adjustment (CT 331)

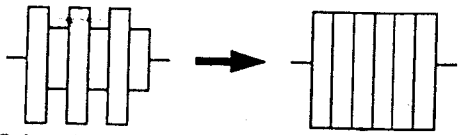
1. Input an NTSC COLOR BAR pattern.
2. Short circuit between pin ⑰ of IC 331 and ground.
3. Adjust CT 331 to obtain color synchronizetion.
4. Remove the jumper wire from IC 331.

REF OSC 8.8 MHz Adjustment (CT 332)

1. Input a PAL COLOR BAR pattern.
2. Short circuit between pin⑰ of IC 331 and ground.
3. Adjust CT 332 to obtain color synchronizetion.
4. Remove the jumper wire from IC 331.

BELL FILTER Adjustment (LV 301)

1. Input a SECAM COLOR BAR pattern.
2. Connect an oscilloscope to rhe Q 302 emitter.
3. Adhust LV 301 so that waveform becomes flat.

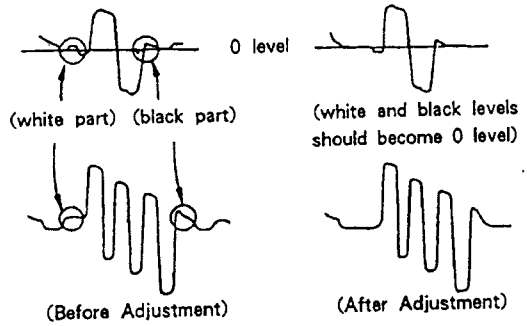


Before Adjustment

After Adjustment

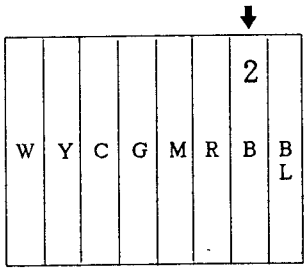
SECAM DISCRI Adjustment (RV 331 R-Y L 331 B-Y)

1. Input a SECAM COLOR BAR pattern.
2. Connect an oscilloscope to pin ① of IC 301.
3. Adjust RV 331(R-Y) so that white and black parts of the waveform of pin ① becomes 0 lecel.
4. Connect an oscilloscope to pin ③ of IC 301.
5. Adjust L 331(B-Y) so that white and black parts of the waveform of pin ③ becomes 0 level.



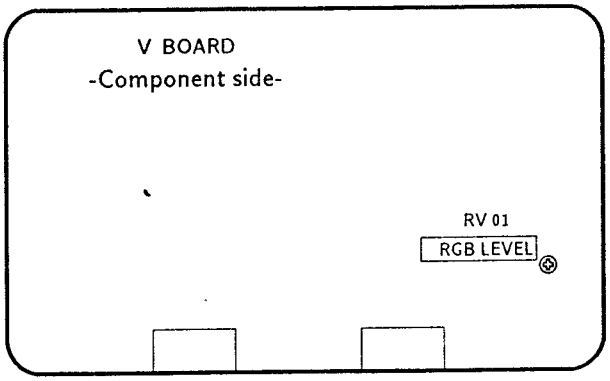
CHARACTER POSITION Adjustment (RV 001)

1. Input PAL COLOR BAR pattern.
2. Adjust RV 001 to position the charcter display at the point indicated by the arrow below.



4-2. V BOARD ADJUSTMENT

(KV-M2141K only)

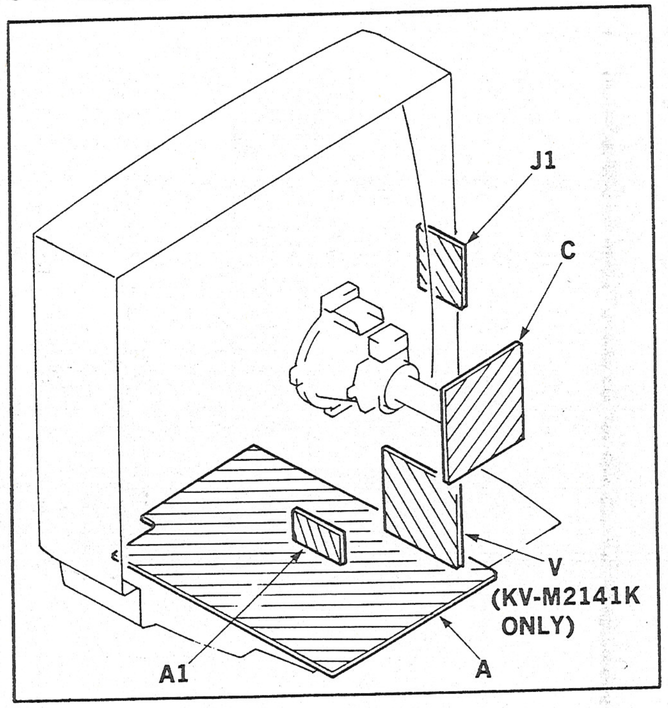


RGB LEVEL Adjustment (RV 01)

1. Set PICTURE to maximum.
2. Adjust RV01 till the RGB output becomes maximum.

SECTION 5
DIAGRAMS

5-1. CIRCUIT BOARDS LOCATION



Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE WIREWOUNO
	: RB	NONFLAMMABLE CEMENT
	: ※	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATUNE
	: ALR	HIGH RIPPLE

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note:

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power is as follows.

Pitch	: 5mm
Rating electrical power	: 1/4W

- Chip resistor is in 1/10W.
- All resistors are in ohms. kΩ: 1000Ω, MΩ: 1000kΩ.
- [nonflammable resistor symbol] : nonflammable resistor.
- [fusible resistor symbol] : fusible resistor.
- [box] : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltage are in V.
- Readings are taken with a 10MΩ digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- ▬▬ : B+ bus.
- ⇨ : Signal path. (RF)

KV-M2140K/M2141K
RM-694

KV-M

SYSTEM CONTROL, A/V OUT, H/V OUT, MEMORY, CHROMA **A**

A

5-2. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

A BOARD

IC	
IC001	D-9
IC002	D-9
IC003	D-10
IC004	E-9
IC005	B-8
IC101	B-2
IC102	B-5
IC201	F-8
IC301	D-5
IC302	B-7
IC331	C-7
IC501	D-2
IC502	C-4
IC601	G-5
IC801	F-3
IC802	E-4

TRANSISTOR	
Q001	D-8
Q003	C-9
Q004	D-10
Q005	B-8
Q006	C-8
Q007	B-4
Q015	D-3
Q016	D-10
Q017	E-9
Q019	D-10
Q020	D-8
Q101	C-2
Q102	C-1
Q103	C-1
Q104	C-1
Q106	A-2
Q107	A-2
Q108	C-2
Q109	B-1
Q110	B-1
Q111	B-1
Q112	A-7
Q113	B-5
Q114	B-5
Q115	A-6
Q123	A-2
Q140	C-2
Q141	C-3
Q302	C-7
Q303	C-7
Q304	B-6
Q305	B-6
Q306	B-6
Q307	B-6
Q310	A-3
Q311	A-3
Q401	B-2
Q457	D-1
Q501	B-4
Q502	B-3
Q503	B-3
Q504	C-3
Q505	B-3
Q601	G-5
Q801	G-4
Q802	H-3
Q803	F-3
Q1301	B-9
Q1302	B-10
Q1303	B-10
Q1304	A-10
Q1305	A-10
Q1306	B-10

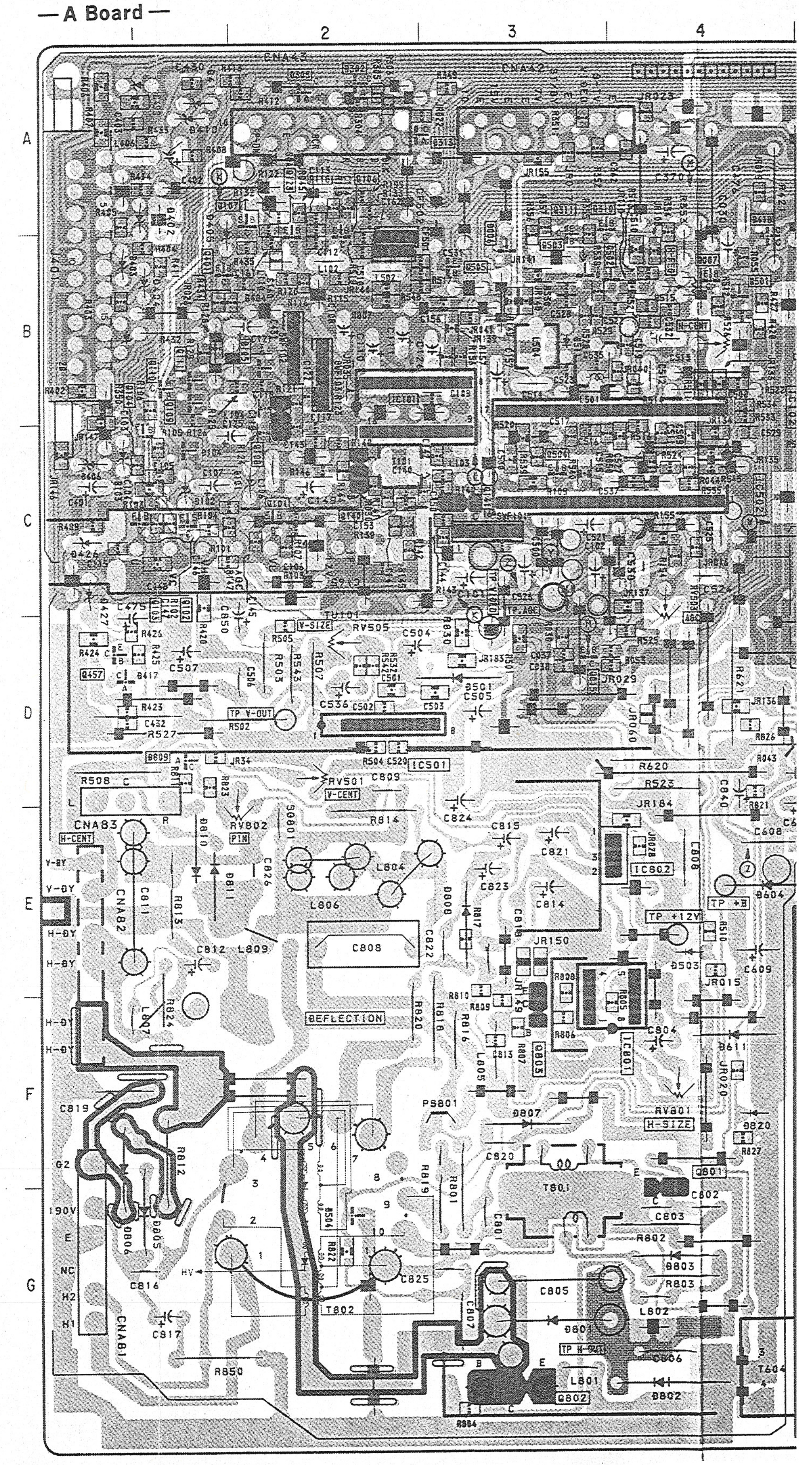
DIODE	
D002	E-10
D004	C-9
D006	B-3
D007	B-8
D008	D-10
D009	B-8
D020	B-8
D101	C-2
D102	C-1
D103	C-1
D105	B-2
D110	C-5
D301	C-6
D302	A-2
D303	B-6
D305	A-2
D306	B-6
D313	A-3
D321	C-5
D324	A-7
D333	D-7
D402	A-1
D403	B-1
D404	B-1
D405	A-2
D406	C-1
D410	A-1
D411	A-1
D417	D-1
D418	A-4
D426	C-1
D501	D-3
D503	E-4
D504	G-2
D511	B-3
D519	C-8
D601	F-7
D602	F-6
D603	F-5
D604	E-4
D605	E-6
D606	D-5
D607	G-5
D608	H-5
D609	G-5
D610	G-5
D611	F-4
D801	G-3
D802	H-4
D803	G-4
D805	G-1
D806	F-1
D807	F-3
D808	E-3
D809	D-1
D820	F-4
D1301	B-10
D1302	B-10
D1303	B-10
D1304	A-10
D1305	A-10
D1306	B-10
D1307	B-10

VARIABLE RESISTOR	
RV001	D-9
RV331	C-6
RV501	D-2
RV502	B-4
RV503	C-4
RV504	B-4
RV505	D-2
RV801	F-4
RV802	E-2

TRIMMER	
CT331	C-7
CT332	C-7

COIL	
LV301	C-7
L331	C-6

— A Board —



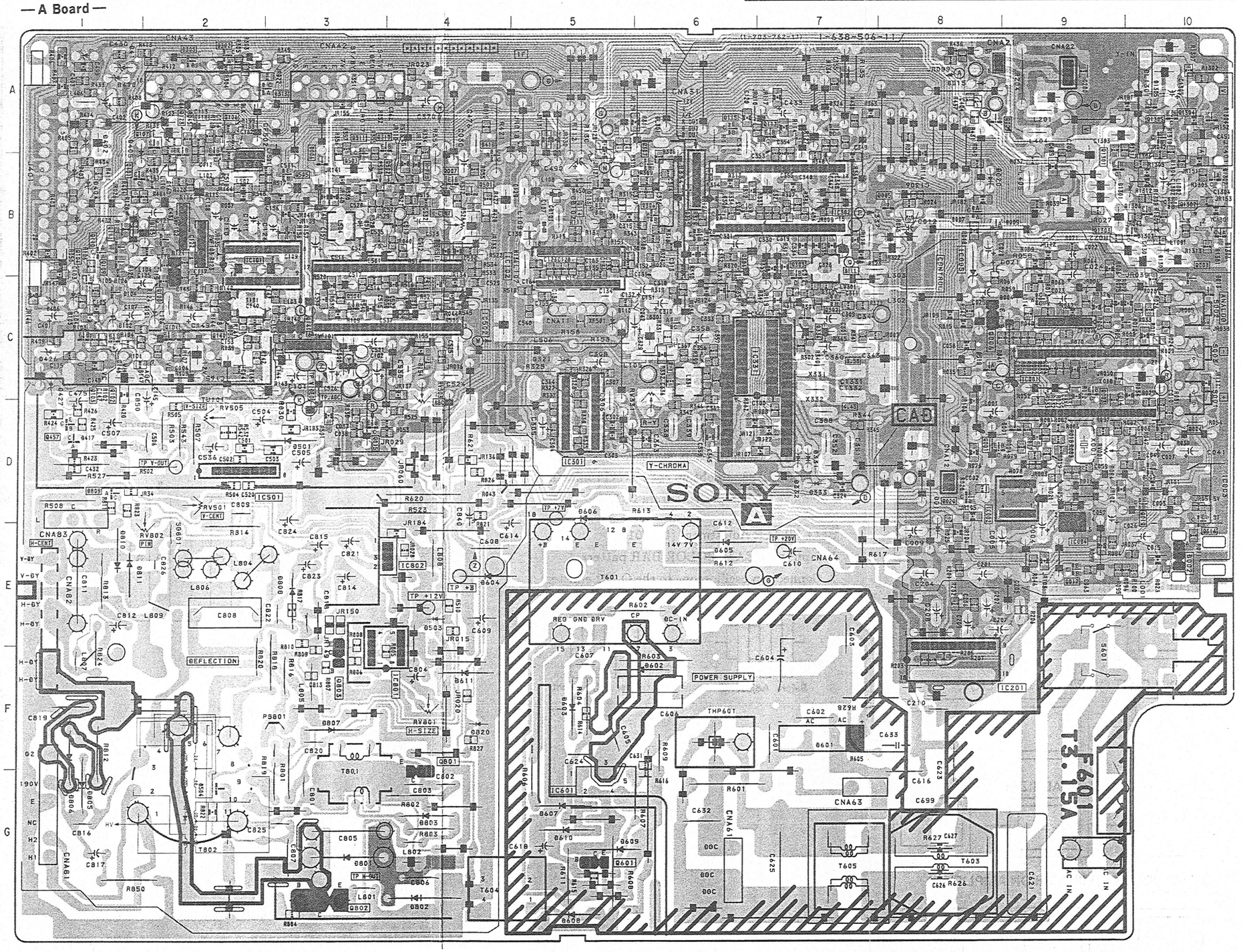
NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

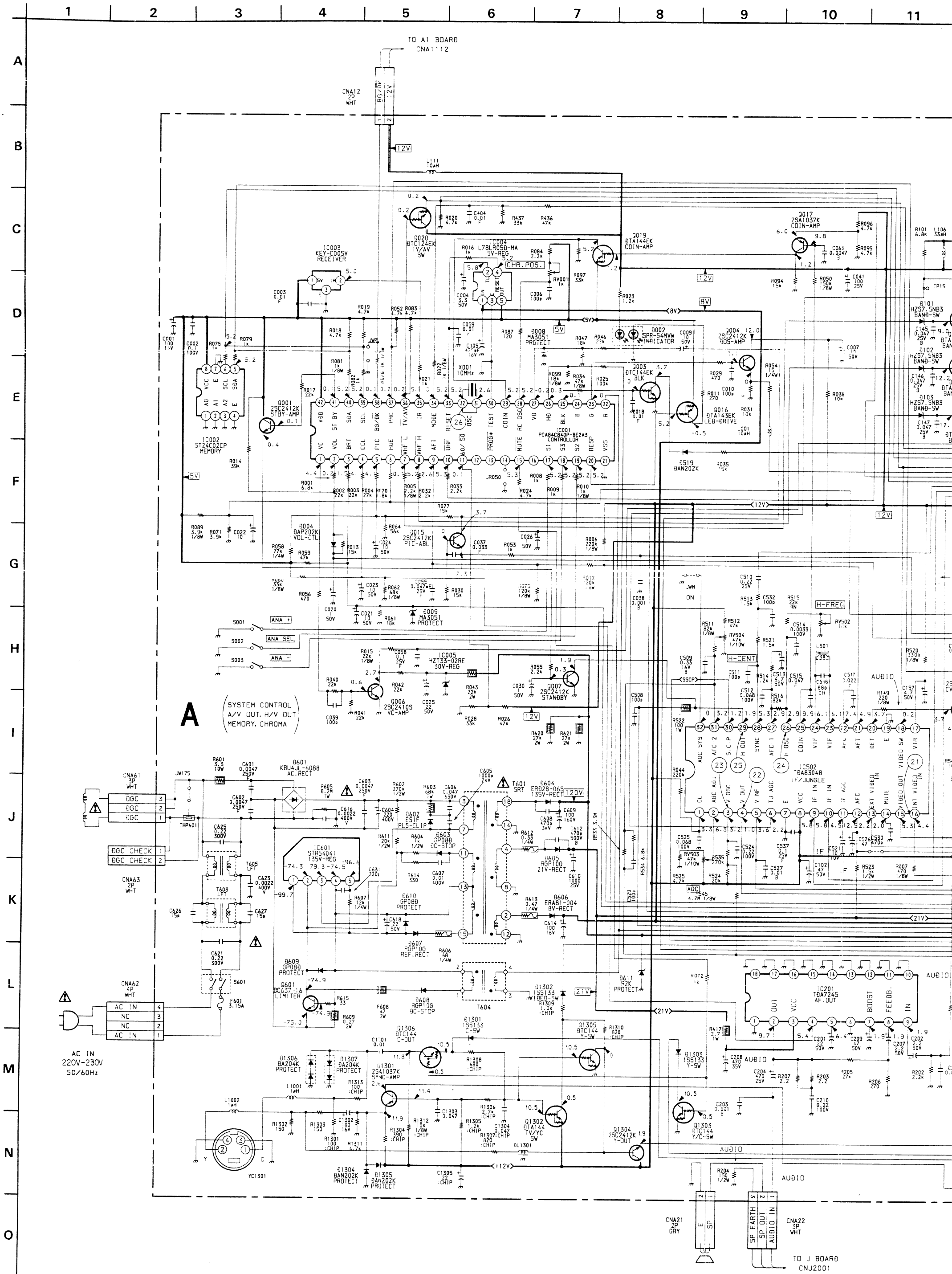
5-2. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

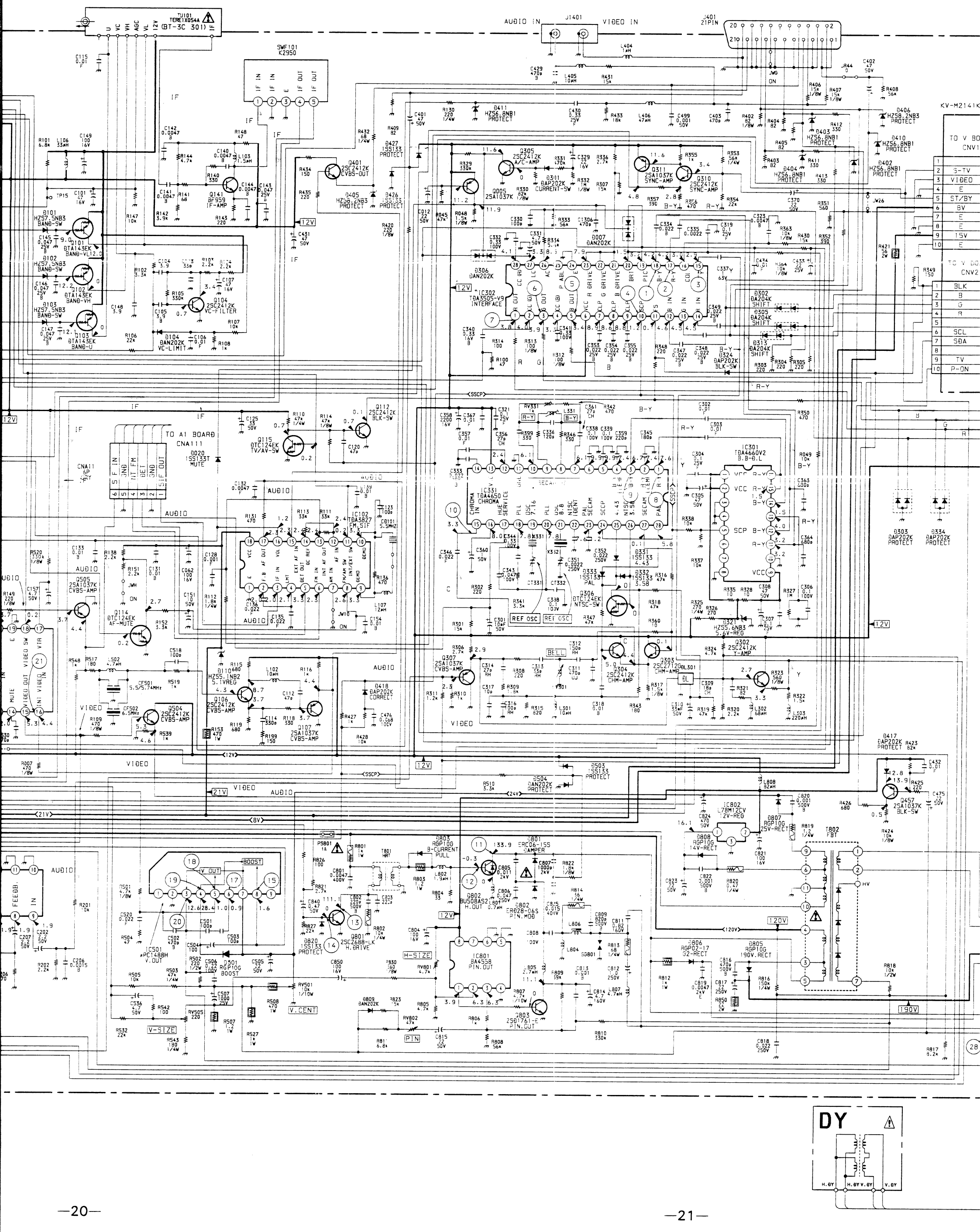
A BOARD

IC						COIL	
IC001	B-9	Q307	B-6	D501	B-3	LV301	C-7
IC002	B-9	Q310	A-3	D503	E-4	L331	C-6
IC003	B-10	Q311	A-3	D504	G-2		
IC004	E-9	Q401	B-2	D511	B-3		
IC005	B-8	Q457	B-1	D519	C-8		
IC101	B-2	Q501	B-4	D601	F-7		
IC102	B-5	Q502	B-3	D602	F-6		
IC201	F-8	Q503	B-3	D603	F-5		
IC301	B-5	Q504	C-3	D604	E-4		
IC302	B-7	Q505	B-3	D605	E-6		
IC331	C-7	Q601	G-5	D606	B-5		
IC501	B-2	Q801	G-4	D607	G-5		
IC502	C-4	Q802	H-3	D608	H-5		
IC601	G-5	Q803	F-3	D609	G-5		
IC801	F-3	Q1301	B-9	D610	G-5		
IC802	E-4	Q1302	B-10	D611	F-4		
		Q1303	B-10	D801	G-3		
		Q1304	A-10	D802	H-4		
		Q1305	A-10	D803	G-4		
		Q1306	B-10	D805	G-1		
TRANSISTOR				D806	F-1		
		DIODE		D807	F-3		
Q001	B-8			D808	E-3		
Q003	C-9	D002	E-10	D809	B-1		
Q004	B-10	D004	C-9	D820	F-4		
Q005	B-8	D006	B-3	D1301	B-10		
Q006	C-8	D007	B-8	D1302	B-10		
Q007	B-4	D008	B-10	D1303	B-10		
Q015	B-3	D009	B-8	D1304	A-10		
Q016	B-10	D020	B-8	D1305	A-10		
Q017	E-9	D101	C-2	D1306	B-10		
Q019	B-10	D102	C-1	D1307	B-10		
Q020	B-8	D103	C-1				
Q101	C-2	D105	B-2				
Q102	C-1	D110	C-5				
Q103	C-1	D301	C-6	VARIABLE RESISTOR			
Q104	C-1	D302	A-2				
Q106	A-2	D303	B-6	RV001	B-9		
Q107	A-2	D305	A-2	RV331	C-6		
Q108	C-2	D306	B-6	RV501	B-2		
Q109	B-1	D313	A-3	RV502	B-4		
Q110	B-1	D321	C-5	RV503	C-4		
Q111	B-1	D324	A-7	RV504	B-4		
Q112	A-7	D333	D-7	RV505	D-2		
Q113	B-5	D402	A-1	RV801	F-4		
Q114	B-5	D403	B-1	RV802	E-2		
Q115	A-6	D404	B-1				
Q123	A-2	D405	A-2				
Q140	C-2	D406	C-1				
Q141	C-3	D410	A-1	TRIMMER			
Q302	C-7	D411	A-1				
Q303	C-7	D417	D-1	CT331	C-7		
Q304	B-6	D418	A-4	CT332	C-7		
Q305	B-6	D426	C-1				
Q306	B-6						

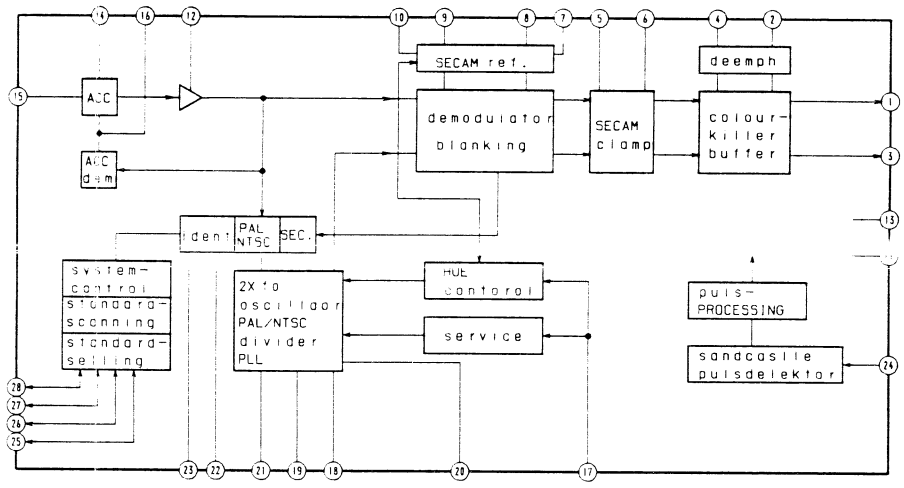
— A Board —



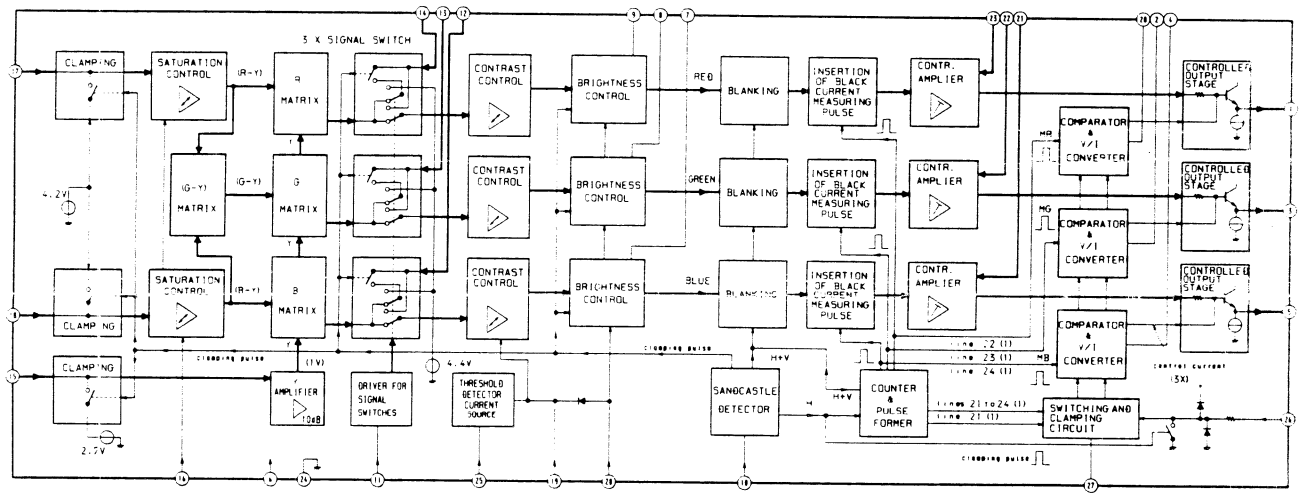

TO A1 BOARD
CNA1112
CNA12
2P
WHT
8G/AV
12V
1
2
12V
L111
10μH
IC003
KEY-C005V
RECEIVER
IC004
L78LR05D-MA
5V-REG
CHR.POS.
Q020
DTC124EK
TV/AV
SW
Q019
DTA144EK
COIN-AMP
Q017
2SA1037K
COIN-AMP
Q016
DTA143EK
LED-DRIVE
Q018
0.01
F
L001
10μH
IC001
PCA84C840P-BE2A3
CONTROLLER
IC002
ST24C02CP
MEMORY
Q001
2SC2412K
STBY-AMP
Q002
SPR-54MVW
INDICATOR
Q003
DTC144EK
BLK
Q004
2SC2412K
DOS-AMP
Q005
4ZT33-02RE
30V-REG
Q006
2SC2410S
VC-AMP
Q007
2SC2412K
STANDBY
Q008
MA3051
PROTECT
Q009
MA3051
PROTECT
Q015
2SC2412K
PIC-ABL
D004
DAP202K
VOL-CTL
D519
DAN202K
D101
HZS7.5NB3
BAND-SW
D102
HZS7.5NB3
BAND-SW
D103
HZS7.5NB3
BAND-SW
S001
S002
S003
ANA +
ANA SEL
ANA -
A
SYSTEM CONTROL
A/V OUT, H/V OUT
MEMORY, CHROMA
JW175
CNA61
3P
WHT
DGC
DGC
DGC
DGC CHECK
DGC CHECK
CNA63
2P
WHT
THP601
D601
KBU4JL-6088
AC.RECT
D602
ES1F
PLS-CLIP
D603
GP08D
DC-STOP
D604
ERA28-06S
135V-RECT
D605
RGP10G
21V-RECT
D606
ERA81-004
8V-RECT
D607
RGP10G
REF.REC
D608
RGP10G
DC-STOP
D609
GP08D
PROTECT
D610
GP08D
PROTECT
D611
PROTECT
IC601
STR54041
135V-REG
T601
SRT
T603
LFT
T604
T605
LFT
Q601
BC637-16
LIMITER
S601
F601
3.15A
CNA62
4P
WHT
AC IN
NC
NC
AC IN
AC IN
220V-230V
50/60Hz
YC1301
Q1301
2SA1037K
SYNC-AMP
Q1302
DTA144
TV/YC
SW
Q1303
DTC144
Y/C-SW
Q1304
2SC2412K
Y-OUT
Q1305
DTC144
Y-SW
Q1306
DTC144
C-OUT
D1301
1SS133
C-SW
D1302
1SS133
VIDEO-SW
D1303
1SS133
Y-SW
D1304
DAN202K
PROTECT
D1305
DAN202K
PROTECT
D1306
DA204K
PROTECT
D1307
DA204K
PROTECT
IC502
TDA8304B
IF/JUNGLE
IC201
TDA7245
AF.OUT
H-FREQ
H-CENT
AUDIO
SSCP
JWM
ON
CNA21
2P
GRY
SP
CNA22
3P
WHT
SP EARTH
SP OUT
AUDIO IN
TO J BOARD
CNJ2001
8V
5V
12V
120V
21V

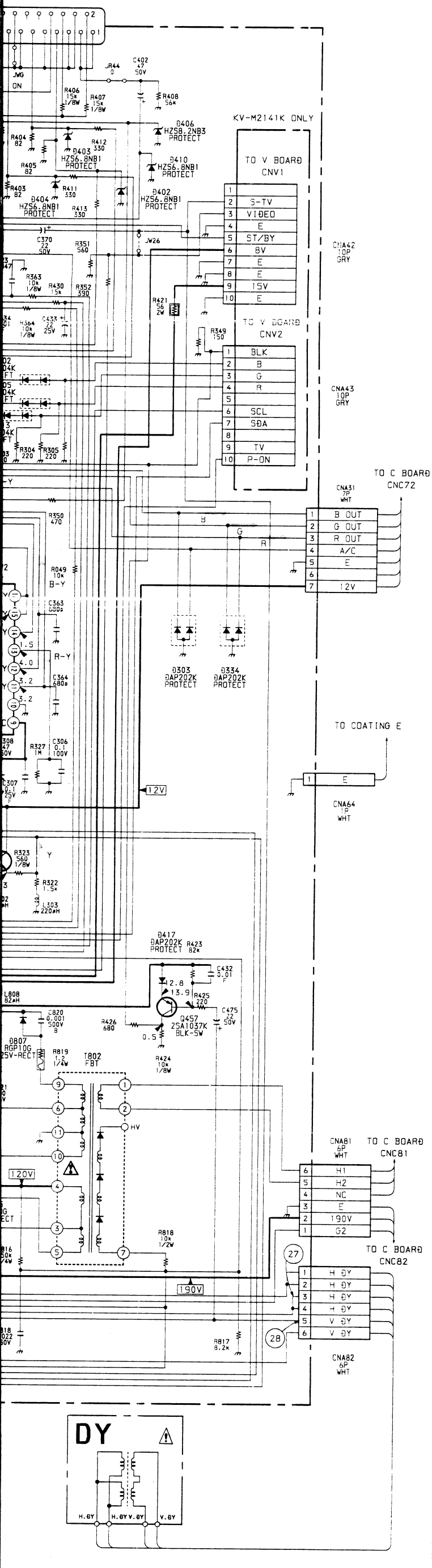

KV-M2141K
TU101 TERE1X054A (BT-3C 301)
SWF101 K2950
AUDIO IN J1401 VIDEO IN
J401 21PIN
IC301 TDA4660V2 B.B-D.L
IC331 TDA4650 CHROMA
IC501 PC1488H V.OUT
IC801 BA4558 PIN.OUT
IC802 L78M12CV 12V-REG
IC102 TDA3827 FM.SIF
IC302 TDA3505-V9 INTERFACE
TO A1 BOARD CNA111
TO V BD CNV1
TO V BD CNV2
REF OSC
V-SIZE
H-SIZE
V.CENT
PIN
BOOST
DY
H.BY
H.BY V.BY
V.BY

A BOARD IC331 TDA4650



A BOARD IC302 TDA3505-V9



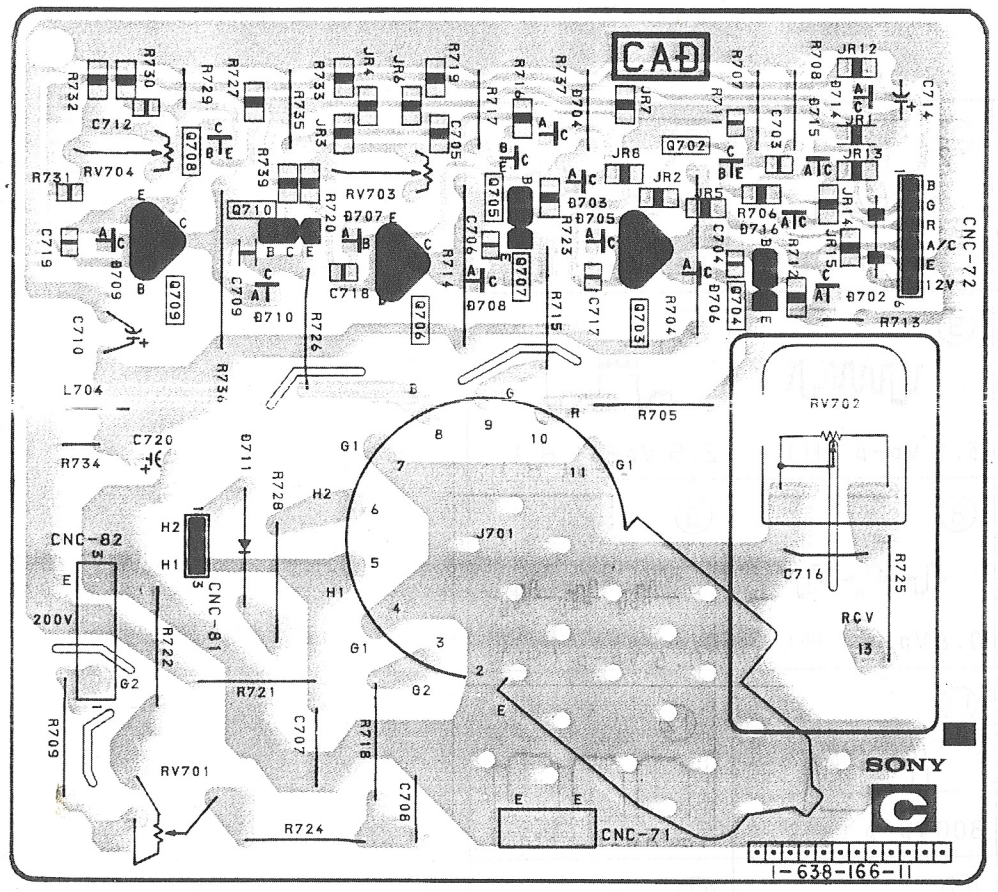


● A Board

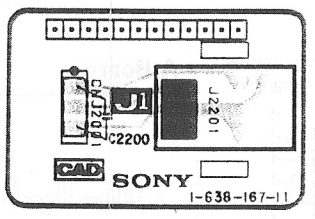
① 1.5Vp-p (H)	② 1.2Vp-p (H)	③ 0.5Vp-p (H)
④ 8.5Vp-p (H)	⑤ 3.2 Vp-p (H)	⑥ 2.5 Vp-p (H)
⑦ 2.5Vp-p (H)	⑧ 0.6Vp-p (H)	⑨ 0.6 Vp-p (H)
⑩ 0.24Vp-p (H)	⑪ 800Vp-p (H)	⑫ 15.0Vp-p (H)
⑬ 230Vp-p (H)	⑭ 1.4Vp-p (H)	⑮ 2.4Vp-p (V)
	⑰ 2.0Vp-p (V)	⑱ 1.3Vp-p (V)
⑲ 2.0Vp-p (V)	⑳ 50 Vp-p (V)	㉑ 2.0Vp-p (H)
㉒ 1.6Vp-p (V)	㉓ 1.8 Vp-p (V)	㉔ 1.8 Vp-p (H)
㉕ 3.6Vp-p (H)	㉖ 1.7Vp-p (10MHz)	㉗ 160 Vp-p (H)
㉘ 4.6Vp-p (V)		

A1 [R. G. B OUT] C [JACK] J1 [TEXT] V

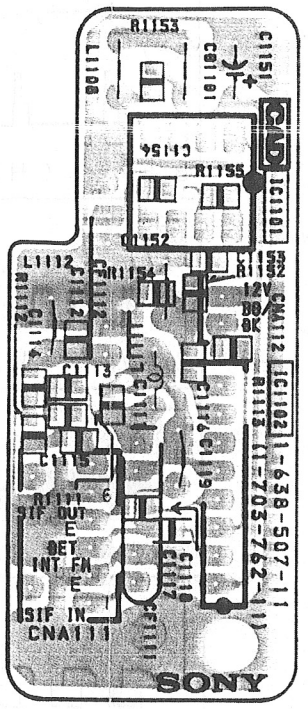
— C Board —



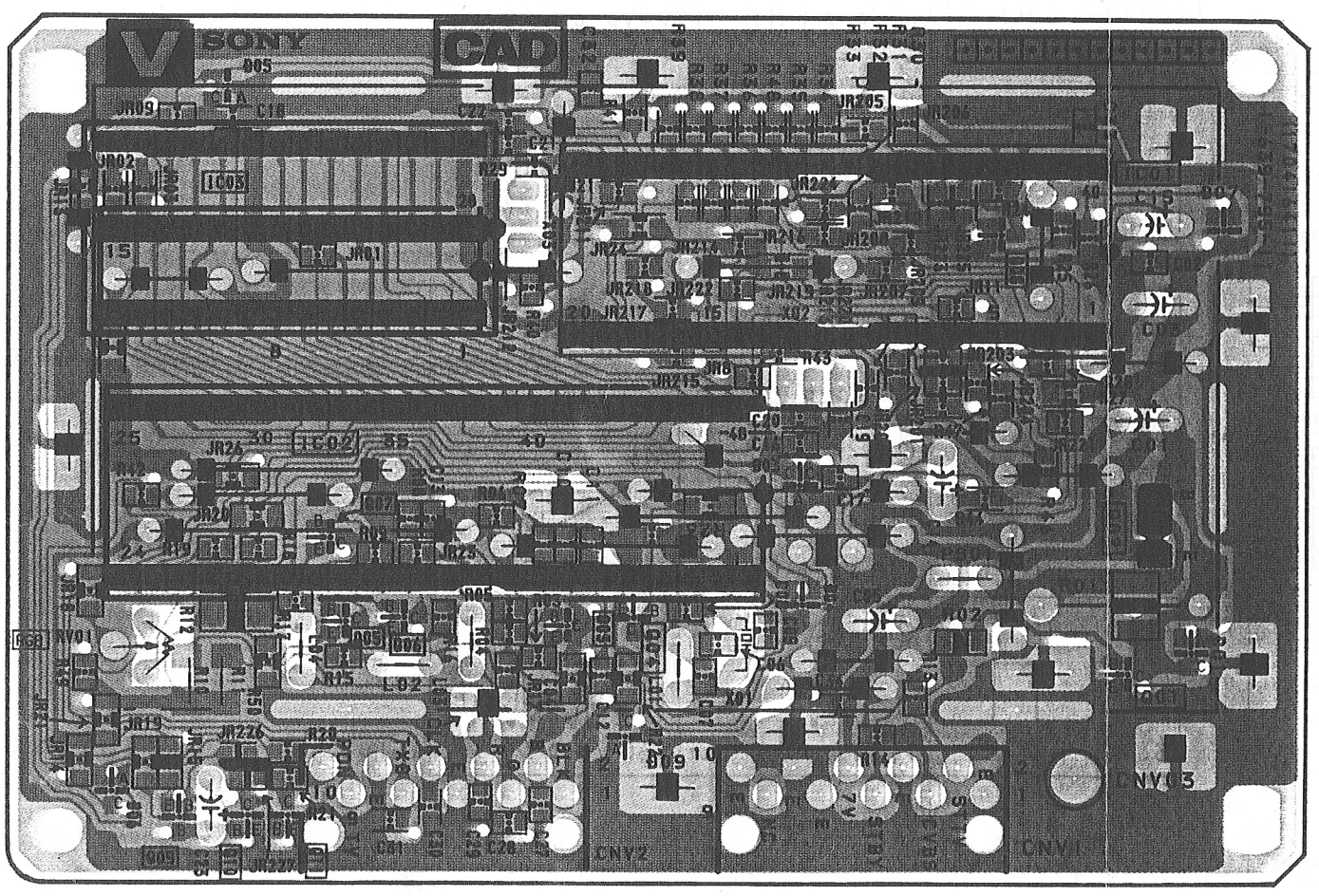
— J1 Board —

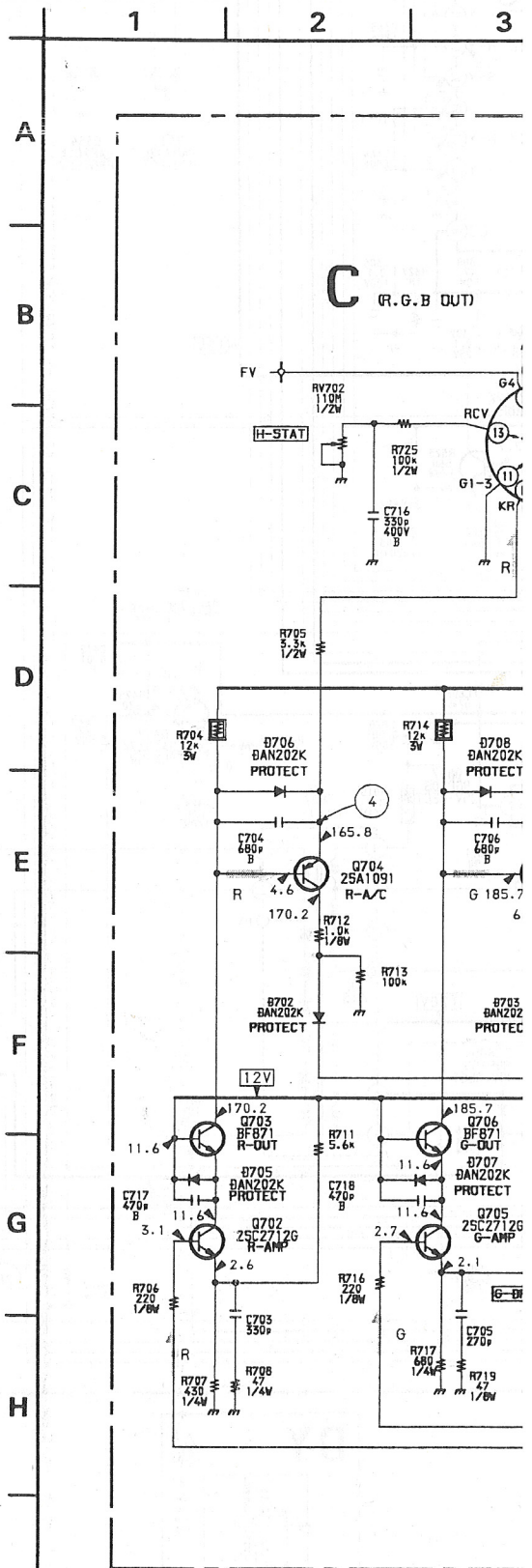


— A1 Board —



— V Board — (KV-M2141K ONLY)





3 4 5 6 7 8 9 10 11 12 13

C (R.G.B OUT)

SCREEN
MIN-MAX
241V-973V

TO A BOARD
CNA81

TO A BOARD
CNA81

TO A BOARD
CNA31

190V

KG KB G2

V901
A51JXH60X
PICTURE
TUBE

CV KR G1 G4 HV

(KV-M2141K ONLY)

TO A BOARD
CNA42

TO A BOARD
CNA43

● C Board

① 21 Vp-p (H)

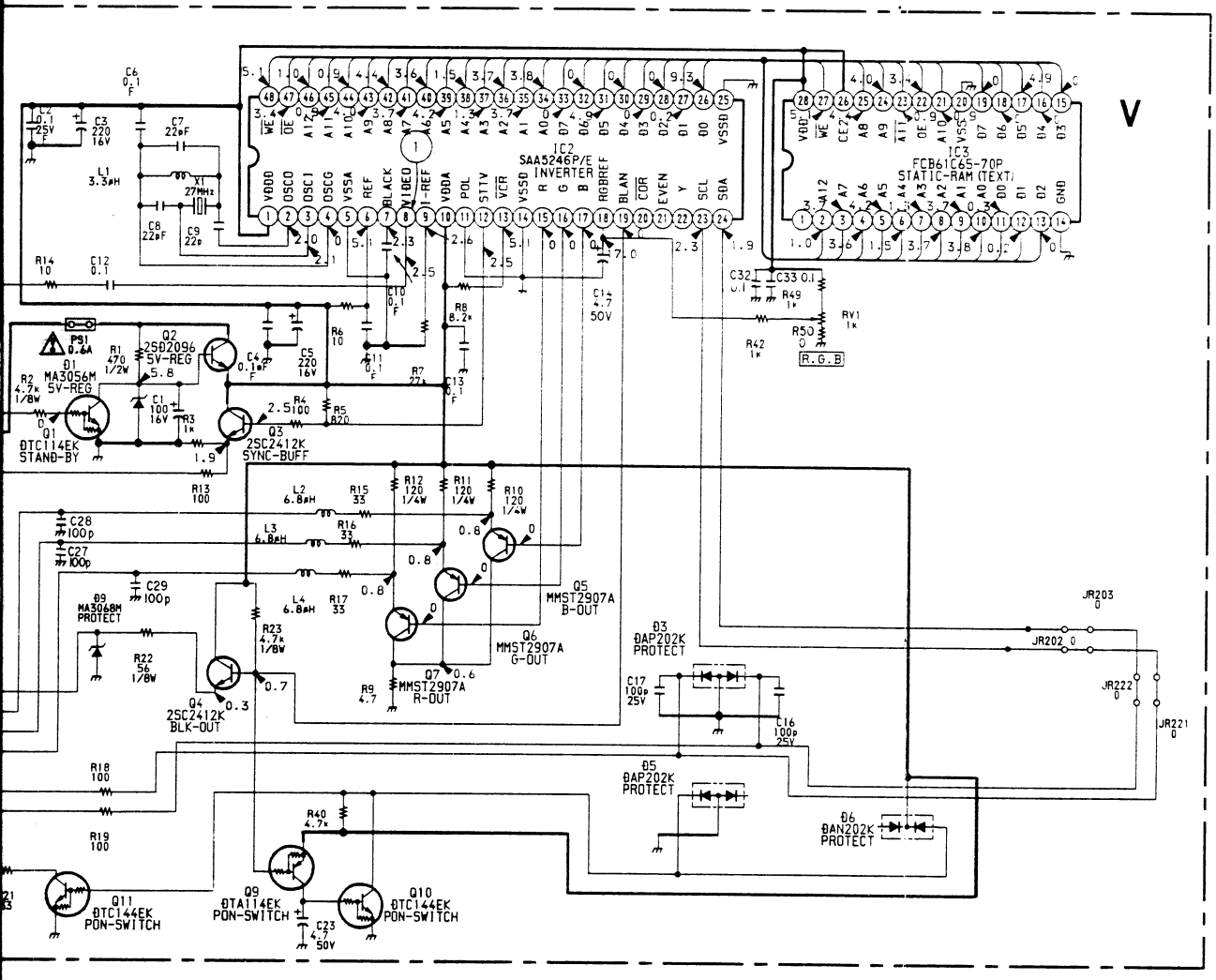
② 50 Vp-p (H)

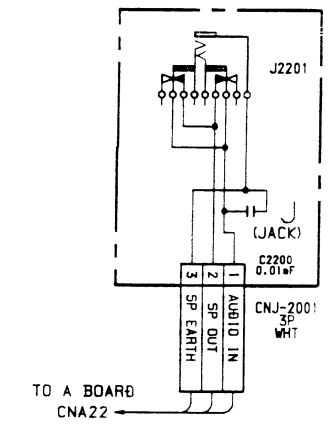
③ 66 Vp-p (H)

④ 76 Vp-p (H)

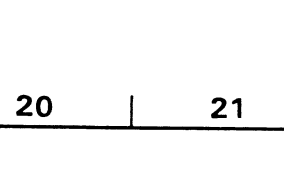
13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22

(2141K ONLY)



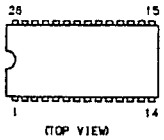


● V Board

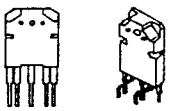


5-3. SEMICONDUCTORS

FCB61C65-70P
TDA3505-V9

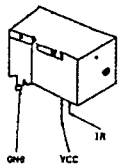


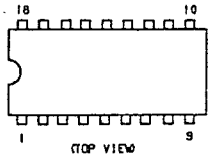
STR54041



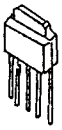
TDA3827
TDA7245

KEY-C00SV-F

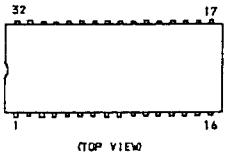




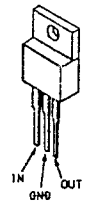
L78LR05D-MA



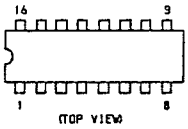
TDA8304



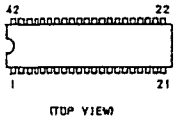
M5F78M12L



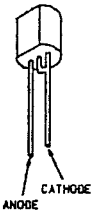
TDA4510/V6
TDA4660V2



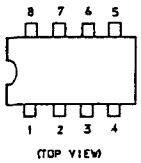
PCA84C840-BE2A



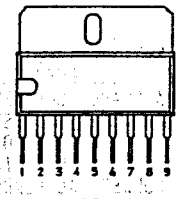
μPC574J



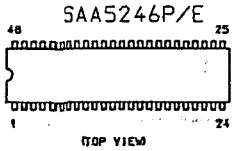
RC4558P
ST24C62CP



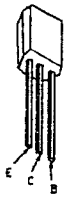
μPC1488H



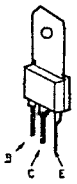
SAA5246P/E



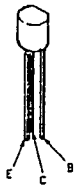
BC637-16-AMM0



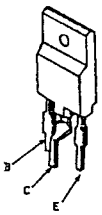
BF871



BF959



BU508AS2



DTA114EK
DTA143EK
DTA144EK
DTC114EK
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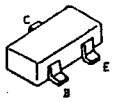
2SB1295-UL6
2SC2412K-R
2SC2712G



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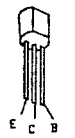

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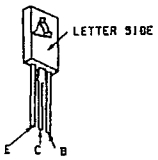

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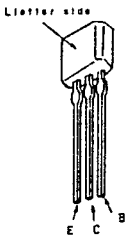

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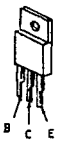

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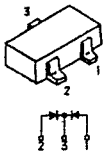

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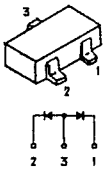

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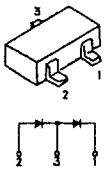

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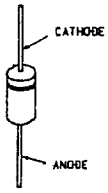
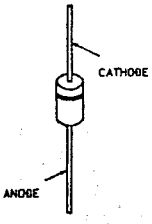
R2K
RU-3AM



ERC06-15S



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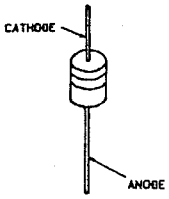
HZS5.6NB3
HZS8.2NB3
RD6.8ES-B1
1SS119



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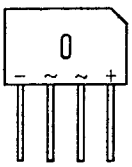

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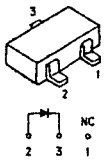
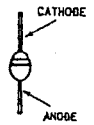
RD6.8M-B2



U05G

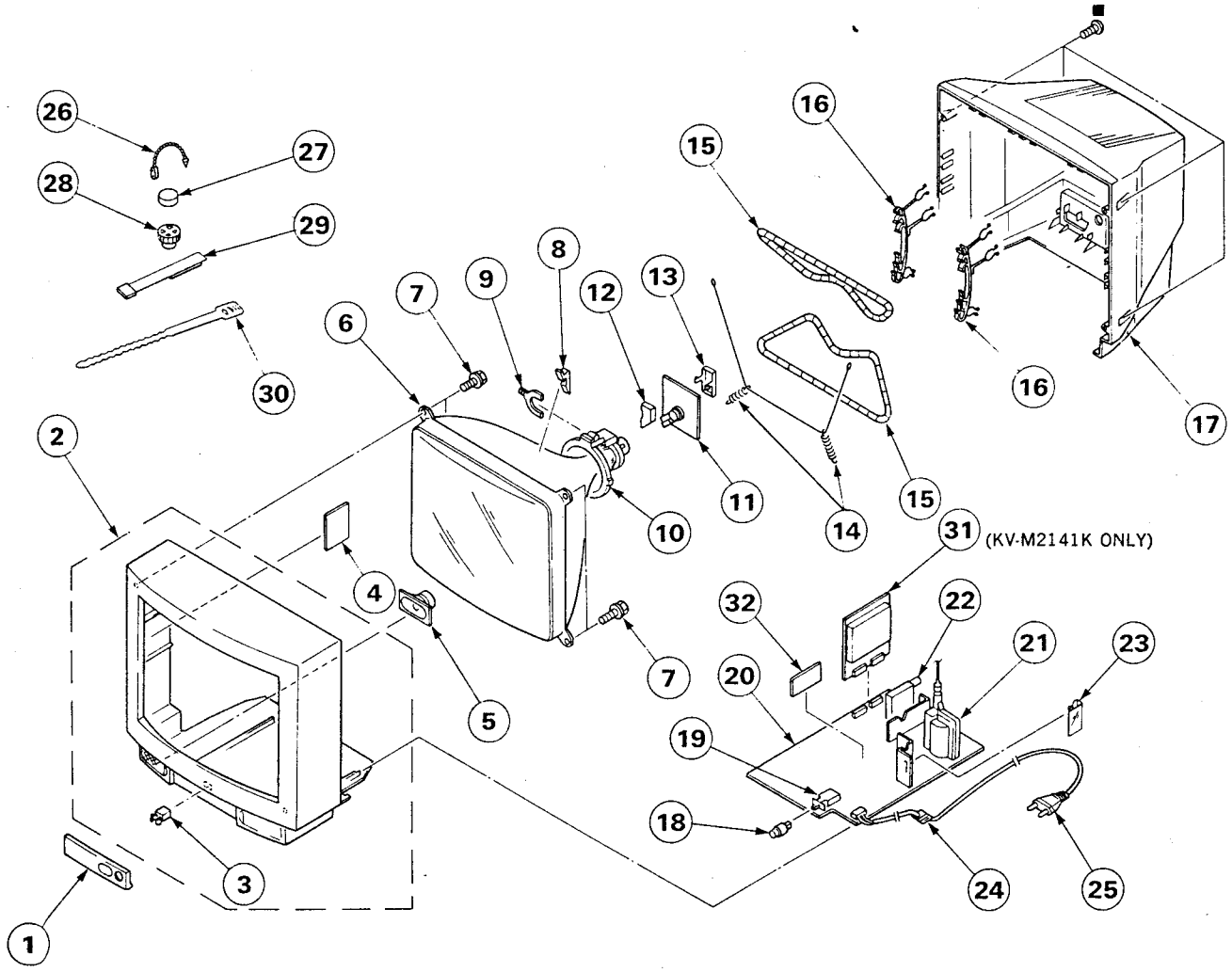


SECTION 6
EXPLODED VIEW

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

■: BVTP4×16 7-685-663-79



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	X-4200-081-1	DOOR ASSY (KV-M2141K ONLY)	
	X-4200-081-3	DOOR ASSY (KV-M2140K ONLY)	
2	X-4200-071-1	CABINET ASSY (WITH BEZEL ASSY)(BLACK)	3
3	4-392-036-01	CATCHER, PUSH	
4	*1-638-167-11	J1 BOARD	
5	1-503-258-21	SPEAKER	
6	⚠8-738-753-05	PICTURE TUBE (A51JXH60X)	
7	4-382-733-01	SCREW (S), PT	
8	3-704-495-01	SPACER, DY	
9	1-452-277-00	MAGNET, BMC	
10	⚠1-451-295-11	DEFLECTION YOKE (Y21PFA2)	
11	A-1638-016-A	C BOARD, COMPLETE	
12	*4-379-167-01	COVER (MAIN), CV	
13	*4-379-160-01	COVER (REAR LID), CV	
14	4-200-433-01	SPRING, EXTENSION	
15	⚠1-426-383-11	COIL, DEMAGNETIZATION	
16	*4-386-622-01	BAND, DGC	
17	4-200-673-01	COVER, REAR	
18	4-200-674-01	BUTTON, POWER	
19	⚠1-571-433-12	SWITCH, PUSH (AC POWER)	
20	A-1632-056-A	A BOARD, COMPLETE	
21	⚠1-439-416-51	TRANSFORMER ASSY, FLYBACK (UX-1650)	
22	⚠1-465-541-11	TUNER (BT-3C801)	
23	*9-910-999-33	PLATE, INSULATION	
24	⚠4-389-201-02	HOLDER, AC CORD	
25	⚠1-590-460-11	CORD, POWER (WITH CONNECTOR)	
26	4-308-870-00	CLIP, LEAD WIRE	
27	1-452-032-00	MAGNET, DISK; 10MM ϕ	
28	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	
29	X-4309-608-0	PERMALLOY ASSY, CONVERGENCE	
30	3-701-007-00	BAND, BINDING	
31	A-1645-020-A	V BOARD, COMPLETE (KV-M2141K ONLY)	
32	A-1630-060-A	A1 BOARD, COMPLETE	

SECTION 7
ELECTRICAL PARTS LIST

A1 **A**

NOTE:
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

When indicating parts by reference number, please include the board name.

CAPACITORS
• MF : μF, PF : μμF

COILS
• MMH : mH, UH : μH

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

RESISTORS
• All resistors are in ohms
• F : nonflammable

REF.NO.	PART NO.	DESCRIPTION			REMARK
	A-1630-060-A	A1 BOARD, COMPLETE **********			
	1-573-787-11	SOCKET, CONNECTOR 6P			
		<CAPACITOR>			
C1111	1-163-103-00	CERAMIC CHIP 27PF	5%	50V	
C1112	1-163-103-00	CERAMIC CHIP 27PF	5%	50V	
C1113	1-163-103-00	CERAMIC CHIP 27PF	5%	50V	
C1114	1-163-103-00	CERAMIC CHIP 27PF	5%	50V	
C1115	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	
C1116	1-164-005-11	CERAMIC CHIP 0.47MF		25V	
C1117	1-164-005-11	CERAMIC CHIP 0.47MF		25V	
C1118	1-164-005-11	CERAMIC CHIP 0.47MF		25V	
C1119	1-106-365-00	MYLAR 0.0082MF	10%	400V	
C1151	1-124-477-11	ELECT 47MF	20%	16V	
C1152	1-106-383-00	MYLAR 0.047MF	10%	100V	
C1153	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	
C1154	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	
		<FILTER>			
CD1101	1-404-710-11	DISCRIMINATOR, CERAMIC			
CF1111	1-527-840-00	FILTER, CERAMIC			
CF1112	1-567-570-11	FILTER, CERAMIC			
		<CONNECTOR>			
CNA111	*1-568-877-51	PIN, CONNECTOR 2P			
		<IC>			
IC1101	8-759-003-90	IC TBA129			
IC1102	8-752-006-12	IC CX20061			
		<COIL>			
L1108	1-408-410-00	INDUCTOR 12UH			
L1111	1-408-411-00	INDUCTOR 15UH			
L1112	1-408-409-00	INDUCTOR 10UH			
		<RESISTOR>			
R1111	1-216-033-00	METAL GLAZE 220	5%	1/10W	
R1112	1-216-033-00	METAL GLAZE 220	5%	1/10W	
R1113	1-216-083-00	METAL GLAZE 27K	5%	1/10W	
R1152	1-216-057-00	METAL GLAZE 2.2K	5%	1/10W	
R1153	1-216-045-00	METAL GLAZE 680	5%	1/10W	
R1154	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W	
R1155	1-216-049-00	METAL GLAZE 1K	5%	1/10W	

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REF.NO.	PART NO.	DESCRIPTION			REMARK
	A-1632-056-A	A BOARD, COMPLETE **********			
	4-200-399-01	SPACER, IC			
	4-200-407-01	HOLDER, LED			
	*4-341-751-01	EYELET			
	*4-341-752-01	EYELET			
	*4-368-683-01	SPRING			
	*4-389-343-01	SPRING			
		<CAPACITOR>			
C001	1-126-101-11	ELECT 100MF	20%	16V	
C002	1-106-220-00	MYLAR 0.1MF	10%	100V	
C003	1-164-232-11	CERAMIC CHIP 0.01MF		50V	
C004	1-123-382-00	ELECT 3.3MF	20%	50V	
C005	1-126-103-11	ELECT 470MF	20%	16V	
C006	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C007	1-124-907-11	ELECT 10MF	20%	50V	
C009	1-124-907-11	ELECT 10MF	20%	50V	
C010	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C012	1-126-233-11	ELECT 22MF	20%	50V	
C018	1-164-232-11	CERAMIC CHIP 0.01MF		50V	
C020	1-124-903-11	ELECT 1MF	20%	50V	
C021	1-124-907-11	ELECT 10MF	20%	50V	
C022	1-124-907-11	ELECT 10MF	20%	50V	
C023	1-124-907-11	ELECT 10MF	20%	50V	
C024	1-124-907-11	ELECT 10MF	20%	50V	
C025	1-126-233-11	ELECT 22MF	20%	50V	
C026	1-124-903-11	ELECT 1MF	20%	50V	
C030	1-124-903-11	ELECT 1MF	20%	50V	
C037	1-163-034-00	CERAMIC CHIP 0.033MF		50V	
C038	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	
C039	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C041	1-124-478-11	ELECT 100MF	20%	25V	
C055	1-163-075-00	CERAMIC CHIP 0.047MF		50V	
C058	1-163-077-00	CERAMIC CHIP 0.1MF	10%	25V	
C059	1-164-232-11	CERAMIC CHIP 0.01MF		50V	
C062	1-126-101-11	ELECT 100MF	20%	16V	
C063	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	
C101	1-124-477-11	ELECT 47MF	20%	16V	
C102	1-124-910-11	ELECT 47MF	20%	50V	
C103	1-163-105-00	CERAMIC CHIP 33PF	5%	50V	
C104	1-164-665-11	CERAMIC CHIP 0.039MF	10%	50V	
C105	1-164-665-11	CERAMIC CHIP 0.039MF	10%	50V	
C106	1-164-232-11	CERAMIC CHIP 0.01MF		50V	
C107	1-124-477-11	ELECT 47MF	20%	16V	
C112	1-163-109-00	CERAMIC CHIP 47PF	5%	50V	
C114	1-163-129-00	CERAMIC CHIP 330PF	5%	50V	
C115	1-164-232-11	CERAMIC CHIP 0.01MF		50V	

A

REF.NO.	PART NO.	DESCRIPTION			REMARK
C120	1-163-173-00	CERAMIC CHIP	47PF	5%	50V
C123	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C125	1-124-917-11	ELECT	33MF	20%	50V
C128	1-163-009-11	CERAMIC CHIP	0.001MF		50V
C131	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C132	1-136-017-00	CERAMIC CHIP	0.0047MF		50V
C133	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C135	1-163-033-00	CERAMIC CHIP	0.022MF		50V
C136	1-163-033-00	CERAMIC CHIP	0.022MF		50V
C139	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C140	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C141	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C142	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C143	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C144	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C145	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C146	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C147	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C148	1-164-665-11	CERAMIC CHIP	0.039MF	10%	50V
C149	1-126-101-11	ELECT	100MF	20%	16V
C151	1-124-907-11	ELECT	10MF	20%	50V
C154	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C157	1-124-927-11	ELECT	4.7MF	20%	50V
C201	1-126-233-11	ELECT	22MF	20%	50V
C202	1-124-925-11	ELECT	2.2MF	20%	50V
C203	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C204	1-124-480-11	ELECT	470MF	20%	25V
C206	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C207	1-124-925-11	ELECT	2.2MF	20%	50V
C208	1-126-104-11	ELECT	470MF	20%	35V
C209	1-124-910-11	ELECT	47MF	20%	50V
C210	1-106-228-00	MYLAR	0.22MF	10%	100V
C301	1-124-907-11	ELECT	10MF	20%	50V
C302	1-163-059-00	CERAMIC CHIP	0.01MF		50V
C303	1-163-059-00	CERAMIC CHIP	0.01MF		50V
C304	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C305	1-124-910-11	ELECT	47MF	20%	50V
C306	1-106-220-00	MYLAR	0.1MF	10%	100V
C307	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C308	1-124-910-11	ELECT	47MF	20%	50V
C309	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C310	1-124-917-11	ELECT	33MF	20%	50V
C311	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C312	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C313	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C314	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C315	1-163-427-91	CERAMIC CHIP	68PF	5%	50V
C316	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C317	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C318	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C319	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C321	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C323	1-163-055-00	CERAMIC CHIP	0.0047MF	10%	50V
C329	1-131-367-00	TANTALUM	22MF	10%	16V
C330	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C331	1-124-927-11	ELECT	4.7MF	20%	50V
C332	1-130-783-00	MYLAR	0.33MF	10%	100V
C333	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C334	1-163-063-00	CERAMIC CHIP	0.022MF	10%	50V
C335	1-163-063-00	CERAMIC CHIP	0.022MF	10%	50V
C336	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C337	1-130-834-00	MYLAR	1MF	10%	63V
C338	1-106-220-00	MYLAR	0.1MF	10%	100V
C339	1-106-220-00	MYLAR	0.1MF	10%	100V
C340	1-162-568-11	CERAMIC CHIP	0.33MF	10%	16V
C341	1-130-783-00	MYLAR	0.33MF	10%	100V
C343	1-106-383-00	MYLAR	0.047MF	10%	100V
C344	1-130-783-00	MYLAR	0.33MF	10%	100V
C345	1-163-187-00	CERAMIC CHIP	180PF	5%	50V
C346	1-163-033-00	CERAMIC CHIP	0.022MF		50V
C347	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C348	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C349	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C351	1-106-375-12	MYLAR	0.022MF	10%	250V
C352	1-106-375-12	MYLAR	0.022MF	10%	250V
C353	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C354	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C355	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C356	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C357	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C358	1-124-556-11	ELECT	2200MF	20%	16V
C359	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C360	1-124-903-11	ELECT	1MF	20%	50V
C361	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C363	1-163-201-00	CERAMIC CHIP	680PF	5%	50V
C364	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C367	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C370	1-126-233-11	ELECT	22MF	20%	50V
C388	1-106-220-00	MYLAR	0.1MF	10%	100V
C401	1-124-910-11	ELECT	47MF	20%	50V
C403	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C404	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C429	1-163-197-00	CERAMIC CHIP	470PF	10%	50V
C430	1-164-336-11	CERAMIC CHIP	0.33MF		25V
C431	1-124-910-11	ELECT	47MF	20%	50V
C432	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C433	1-126-233-11	ELECT	22MF	20%	25V
C434	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C475	1-126-233-11	ELECT	22MF	20%	50V
C476	1-106-216-00	MYLAR	0.068MF	10%	100V
C490	1-124-910-11	ELECT	47MF	20%	50V
C499	1-163-205-00	CERAMIC CHIP	0.001MF	10%	50V
C501	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C502	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C503	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C504	1-124-122-11	ELECT	100MF	20%	50V
C505	1-126-233-11	ELECT	22MF	20%	50V
C506	1-106-228-00	MYLAR	0.22MF	10%	100V
C507	1-124-557-11	ELECT	1000MF	20%	25V
C508	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C509	1-162-568-11	CERAMIC CHIP	0.33MF	10%	16V
C510	1-163-081-00	CERAMIC CHIP	0.22MF		25V
C511	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C512	1-106-216-00	MYLAR	0.068MF	10%	100V
C513	1-124-927-11	ELECT	4.7MF	20%	50V
C514	1-136-298-00	FILM	0.0033MF	5%	100V
C515	1-163-035-00	CERAMIC CHIP	0.047MF		50V
C516	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C517	1-163-033-00	CERAMIC CHIP	0.022MF		50V
C518	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C520	1-163-033-00	CERAMIC CHIP	0.022MF		50V
C521	1-131-377-00	TANTALUM	10MF	10%	10V
C524	1-106-228-00	MYLAR	0.22MF	10%	100V
C525	1-106-216-00	MYLAR	0.068MF	10%	100V
C526	1-124-910-11	ELECT	47MF	20%	50V
C527	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C529	1-163-117-00	CERAMIC CHIP	100PF	5%	50V

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
C530	1-163-197-00	CERAMIC CHIP	470PF	5%	50V
C532	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C536	1-124-927-11	ELECT	4.7MF	20%	50V
C537	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C540	1-216-295-00	METAL GLAZE	0 5%	1/10W	
⚠C601	1-161-964-61	CERAMIC	0.0047MF		250V
⚠C602	1-161-964-61	CERAMIC	0.0047MF		250V
C603	1-162-599-12	CERAMIC	0.0047MF		250V
C604	1-125-318-00	ELECT(BLOCK)	220MF	20%	400V
C605	1-161-754-00	CERAMIC	0.001MF	10%	2KV
C606	1-136-637-11	FILM	0.047MF	10%	630V
C607	1-106-367-00	MYLAR	0.01MF	10%	400V
C608	1-161-753-00	CERAMIC	470PF	10%	3KV
C609	1-124-347-00	ELECT	100MF	20%	160V
C610	1-124-557-11	ELECT	1000MF	20%	25V
C612	1-102-228-00	CERAMIC	470PF	10%	500V
C614	1-126-101-11	ELECT	100MF	20%	16V
⚠C616	1-164-246-11	CERAMIC	0.0022MF	20%	400V
C618	1-126-233-11	ELECT	22MF	20%	50V
⚠C621	1-136-517-11	FILM	0.22MF	20%	300V
⚠C623	1-164-246-11	CERAMIC	0.0022MF	20%	400V
⚠C625	1-136-517-11	FILM	0.22MF	20%	300V
⚠C626	1-163-161-91	CERAMIC CHIP	15PF	5%	50V
⚠C627	1-163-161-91	CERAMIC CHIP	15PF	5%	50V
C631	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C801	1-101-821-00	CERAMIC	0.0022MF		500V
C802	1-102-244-00	CERAMIC	220PF	10%	500V
C804	1-126-101-11	ELECT	100MF	20%	16V
⚠C805	1-136-080-11	FILM	0.011MF	3%	2KV
C806	1-136-187-11	FILM	0.047MF	10%	250V
⚠C807	1-161-731-51	CERAMIC	0.001MF	10%	2KV
C808	1-136-933-11	FILM	1MF	5%	100V
C809	1-102-212-00	CERAMIC	820PF	10%	500V
C811	1-136-540-11	FILM	0.82MF	5%	160V
C812	1-124-634-11	ELECT	1MF	20%	250V
C813	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C814	1-126-542-11	ELECT	4.7MF	20%	160V
C815	1-126-233-11	ELECT	22MF	20%	50V
C816	1-102-228-00	CERAMIC	470PF	10%	500V
C817	1-123-948-00	ELECT	22MF	20%	250V
C818	1-106-375-12	MYLAR	0.022MF	10%	250V
C819	1-162-114-00	CERAMIC	0.0047MF		2KV
C820	1-162-318-11	CERAMIC	0.001MF	10%	500V
C821	1-126-101-11	ELECT	100MF	20%	16V
C822	1-162-318-11	CERAMIC	0.001MF	10%	500V
C823	1-126-233-11	ELECT	22MF	20%	50V
C824	1-124-913-11	ELECT	470MF	20%	50V
C825	1-106-371-00	MYLAR	0.015MF	10%	400V
C840	1-124-902-00	ELECT	0.47MF	20%	50V
C850	1-126-101-11	ELECT	100MF	20%	16V
C1301	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1302	1-126-101-11	ELECT	100MF	20%	16V
C1303	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C1304	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C1305	1-126-233-11	ELECT	22MF	20%	50V
C1306	1-163-005-11	CERAMIC CHIP	470PF	10%	50V

<FILTER>

CD101	1-579-110-11	DISCRIMINATOR, CERAMIC	
CF501	1-404-801-11	TRAP, CERAMIC	
CF502	1-409-327-00	TRAP, CERAMIC (6.5MHZ)	
SWF101	1-409-327-00	TRAP, CERAMIC (6.5MHZ)	

REF.NO.	PART NO.	DESCRIPTION	REMARK

<CONNECTOR>

CNA11	*1-506-947-11	PIN, CONNECTOR 6P	
CNA12	*1-568-877-51	PIN, CONNECTOR 2P	
CNA21	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)	
CNA22	*1-568-878-51	PIN, CONNECTOR 3P	
CNA42	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR	
CNA43	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR	
CNA61	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
CNA62	*1-580-844-11	PIN, CONNECTOR (POWER)	
CNA63	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
CNA64	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P	
CNA81	*1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P	
CNA82	*1-568-536-11	PLUG (MINIATURE DY) 6P	

<TRIMMER>

CT331	1-141-418-11	CAP, ADJ	
CT332	1-141-418-11	CAP, ADJ	

<DIODE>

D002	8-719-920-55	DIODE SPR-54MVW	
D004	8-719-914-44	DIODE DAP202K	
D007	8-719-400-18	DIODE MA152WK	
D008	8-719-400-41	DIODE MA3051	
D009	8-719-400-41	DIODE MA3051	
D020	8-719-911-19	DIODE 1SS119	
D101	8-719-110-03	DIODE RD7.5ES-B2	
D102	8-719-110-03	DIODE RD7.5ES-B2	
D103	8-719-110-03	DIODE RD7.5ES-B2	
D104	8-719-400-18	DIODE MA152WK	
D110	8-719-109-85	DIODE RD5.1ES-B2	
D301	8-719-914-44	DIODE DAP202K	
D302	8-719-800-76	DIODE 1SS226	
D303	8-719-914-44	DIODE DAP202K	
D305	8-719-800-76	DIODE 1SS226	
D306	8-719-400-18	DIODE MA152WK	
D313	8-719-800-76	DIODE 1SS226	
D321	8-719-109-89	DIODE RD5.6ES-B2	
D324	8-719-914-44	DIODE DAP202K	
D331	8-719-911-19	DIODE 1SS119	
D332	8-719-911-19	DIODE 1SS119	
D333	8-719-911-19	DIODE 1SS119	
D334	8-719-914-44	DIODE DAP202K	
D402	8-719-109-97	DIODE RD6.8ES-B2	
D403	8-719-109-97	DIODE RD6.8ES-B2	
D404	8-719-109-97	DIODE RD6.8ES-B2	
D405	8-719-110-09	DIODE RD8.2ES-B3	
D406	8-719-110-09	DIODE RD8.2ES-B3	
D411	8-719-109-97	DIODE RD6.8ES-B2	
D417	8-719-914-44	DIODE DAP202K	
D418	8-719-914-44	DIODE DAP202K	
D426	8-719-911-19	DIODE 1SS119	
D427	8-719-911-19	DIODE 1SS119	
D450	8-719-978-31	DIODE DTZ6.8-TT11	
D501	8-719-300-33	DIODE RU-3AM	
D503	8-719-911-19	DIODE 1SS119	
D504	8-719-400-18	DIODE MA152WK	
D519	8-719-400-18	DIODE MA152WK	
D601	8-719-946-90	DIODE KBU4JL-6088	
D602	8-719-976-64	DIODE RGP02-17	
D603	8-719-911-55	DIODE U05G	

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The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
D604	8-719-928-08	DIODE ERD28-08S	
D605	8-719-300-33	DIODE RU-3AM	
D606	8-719-980-78	DIODE ERA83-006	
D607	8-719-300-33	DIODE RU-3AM	
D608	8-719-300-33	DIODE RU-3AM	
D609	8-719-911-55	DIODE U05G	
D610	8-719-911-55	DIODE U05G	
D611	8-719-312-40	DIODE R2K	
D801	8-719-945-80	DIODE ERC06-15S	
D802	8-719-928-08	DIODE ERD28-08S	
D803	8-719-300-33	DIODE RU-3AM	
D805	8-719-300-33	DIODE RU-3AM	
D806	8-719-976-64	DIODE RGP02-17	
D807	8-719-300-33	DIODE RU-3AM	
D808	8-719-300-33	DIODE RU-3AM	
D809	8-719-400-18	DIODE MA152WK	
D820	8-719-911-19	DIODE 1SS119	
D1301	8-719-911-19	DIODE 1SS119	
D1302	8-719-911-19	DIODE 1SS119	
D1303	8-719-911-19	DIODE 1SS119	
D1304	8-719-400-18	DIODE MA152WK	
D1305	8-719-400-18	DIODE MA152WK	
D1306	8-719-800-76	DIODE 1SS226	
D1307	8-719-800-76	DIODE 1SS226	
		<DELAY LINE>	
DL301	1-236-062-11	MODULE, Y DELAY LINE	
DL1301	1-415-613-11	DELAY LINE, Y	
		<FUSE>	
F601 ⚠	1-576-016-11	FUSE, GLASS-TUBE (TIME-LAG) 3.15A/250V	
	1-533-230-11	HOLDER, FUSE; F601	
	4-201-057-01	COVER, FUSE; F601	
		<IC>	
IC001	8-759-517-38	IC PCA84C840P-BE2A3	
IC002	8-759-988-32	IC ST24C02CP	
IC003	8-749-922-13	IC KEY-C00SV-F	
IC004	8-759-805-37	IC L78LR05D-MA	
IC005	8-759-157-40	IC UPC574J	
IC102	8-759-044-41	IC TDA3827-V3	
IC201	8-759-502-74	IC TDA7245	
IC301	8-759-505-39	IC TDA4660V2	
IC302	8-759-512-04	IC TDA3505-V1	
IC331	8-759-521-22	IC TDA4650/V4	
IC501	8-759-113-05	IC UPC1488H	
IC502	8-759-515-72	IC TDA8304	
IC601	8-749-901-65	IC STR54041	
IC801	8-759-945-58	IC RC4558P	
IC802	8-759-604-39	IC M5F78M12L	
		<JACK>	
J401	1-561-534-00	SOCKET 21P	
J1401	1-563-500-11	JACK BLOCK, PIN (L TYPE) 2P	
		<COIL>	
L001	1-408-409-00	INDUCTOR 10UH	
L102	1-408-409-00	INDUCTOR 10UH	
L103	1-408-399-00	INDUCTOR 1.5UH	
L106	1-408-415-00	INDUCTOR 33UH	
L107	1-408-410-00	INDUCTOR 12UH	
L111	1-410-872-21	INDUCTOR 10UH	
L301	1-408-409-00	INDUCTOR 10UH	
L302	1-408-419-00	INDUCTOR 68UH	
L303	1-408-425-00	INDUCTOR 220UH	
L331	1-404-554-11	COIL	
L404	1-408-397-00	INDUCTOR 1UH	
L405	1-408-409-00	INDUCTOR 10UH	
L406	1-408-417-00	INDUCTOR 47UH	
L501	1-404-493-00	COIL	
L502	1-408-405-00	INDUCTOR 4.7UH	
L801	1-407-365-00	COIL,CHOKE	
L802	*1-420-872-00	COIL, AIR CORE	
L804	1-459-390-00	COIL (WITH CORE)	
L805	1-459-105-21	COIL(WITH CORE)	
L806	1-459-652-12	HLC	
L807	1-408-239-00	INDUCTOR 4.7MMH	
L808	1-408-226-00	INDUCTOR 82UH	
L1001	1-408-397-00	INDUCTOR 1UH	
L1002	1-408-397-00	INDUCTOR 1UH	
		<VARIABLE COIL>	
LV301	1-404-554-11	COIL	
		<IC LINK>	
PS801 ⚠	1-532-637-91	LINK, IC 1A	
		<TRANSISTOR>	
Q001	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q003	8-729-901-01	TRANSISTOR DTC144EK	
Q004	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q005	8-729-923-54	TRANSISTOR DTA143TK	
Q006	8-729-922-66	TRANSISTOR 2SC2410SN	
Q007	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q015	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q016	8-729-901-47	TRANSISTOR DTA143EK	
Q017	8-729-216-22	TRANSISTOR 2SA1162-G	
Q019	8-729-901-06	TRANSISTOR DTA144EK	
Q020	8-729-901-00	TRANSISTOR DTC124EK	
Q101	8-729-901-47	TRANSISTOR DTA143EK	
Q102	8-729-901-47	TRANSISTOR DTA143EK	
Q103	8-729-901-47	TRANSISTOR DTA143EK	
Q104	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q106	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q107	8-729-216-22	TRANSISTOR 2SA1162-G	
Q112	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q114	8-729-901-00	TRANSISTOR DTC124EK	
Q115	8-729-901-00	TRANSISTOR DTC124EK	
Q141	8-729-000-12	TRANSISTOR BF959	
Q302	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q303	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q304	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q305	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q306	8-729-901-00	TRANSISTOR DTC124EK	
Q307	8-729-216-22	TRANSISTOR 2SA1162-G	
Q310	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q311	8-729-216-22	TRANSISTOR 2SA1162-G	
Q401	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q457	8-729-216-22	TRANSISTOR 2SA1162-G	
Q504	8-729-920-74	TRANSISTOR 2SC2412K-QR	

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q505	8-729-216-22	TRANSISTOR 2SA1162-G	
Q601	8-729-906-74	TRANSISTOR BC637-16	
Q801	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q802	8-729-925-64	TRANSISTOR BU508AS2	
Q803	8-729-202-03	TRANSISTOR 2SD1408-Y	
Q1301	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1302	8-729-901-06	TRANSISTOR DTA144EK	
Q1303	8-729-901-01	TRANSISTOR DTC144EK	
Q1304	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1305	8-729-901-01	TRANSISTOR DTC144EK	
Q1306	8-729-901-01	TRANSISTOR DTC144EK	

<RESISTOR>

JR44	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR99	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR003	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR004	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR005	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR006	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR009	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR010	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR011	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR012	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR015	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR016	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR017	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR018	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR019	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR020	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR026	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR027	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR028	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR029	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR030	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR034	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR036	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR037	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR038	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR039	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR045	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR050	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR051	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR052	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR060	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR101	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR102	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR103	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR104	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR105	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR106	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR107	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR108	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR109	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR110	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR111	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR116	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR117	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR118	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR119	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR121	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR122	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR123	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR125	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR126	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR127	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR128	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR129	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR130	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR131	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR133	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR134	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR135	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR136	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR137	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR139	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR144	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR146	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR147	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR148	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR149	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR150	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR151	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR151	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR152	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR152	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR153	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR155	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR181	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR182	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR183	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR184	1-216-296-00	METAL GLAZE	0	5%	1/8W
JRC38	1-216-295-00	METAL GLAZE	0	5%	1/10W
R001	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R002	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R003	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R004	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R005	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W
R006	1-216-254-00	METAL GLAZE	220K	5%	1/8W
R007	1-216-190-00	METAL GLAZE	470	5%	1/8W
R008	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R009	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R010	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R011	1-216-035-00	METAL GLAZE	270	5%	1/10W
R012	1-216-248-00	METAL GLAZE	120K	5%	1/8W
R013	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R014	1-216-748-11	METAL GLAZE	39K	5%	1/10W
R015	1-216-230-00	METAL GLAZE	22K	5%	1/8W
R016	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R017	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R018	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R019	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R020	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R021	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R022	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R023	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R024	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R025	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R026	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R028	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R029	1-216-041-00	METAL GLAZE	470	5%	1/10W
R030	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R031	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R032	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R033	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R034	1-216-238-00	METAL GLAZE	47K	5%	1/8W
R035	1-216-077-00	METAL GLAZE	15K	5%	1/10W

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REF.NO.	PART NO.	DESCRIPTION				REMARK
R038	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R040	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R041	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R042	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R043	1-215-900-11	METAL OXIDE	22K	5%	2W	
R044	1-216-105-00	METAL GLAZE	220K	5%	1/10W	
R045	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R046	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R047	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R048	1-216-202-00	METAL GLAZE	1.5K	5%	1/8W	
R049	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R050	1-216-250-00	METAL GLAZE	150K	5%	1/8W	
R052	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R053	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R054	1-249-395-11	CARBON	15	5%	1/4W	
R055	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R056	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R058	1-249-434-11	CARBON	27K	5%	1/4W	
R059	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R060	1-216-234-00	METAL GLAZE	33K	5%	1/8W	
R061	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R062	1-216-242-00	METAL GLAZE	68K	5%	1/8W	
R064	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R070	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R071	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R072	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R075	1-216-248-00	METAL GLAZE	120K	5%	1/8W	
R076	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R077	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R078	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R079	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R081	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R082	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R083	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R084	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R086	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R087	1-216-027-00	METAL GLAZE	120	5%	1/10W	
R089	1-216-212-00	METAL GLAZE	3.9K	5%	1/8W	
R094	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R095	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R096	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R097	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R099	1-216-228-00	METAL GLAZE	18K	5%	1/8W	
R100	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R101	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R102	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R103	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R104	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R105	1-216-109-00	METAL GLAZE	330K	5%	1/10W	
R106	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R107	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R108	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R109	1-216-190-00	METAL GLAZE	470	5%	1/8W	
R110	1-249-437-11	CARBON	47K	5%	1/4W	
R111	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R112	1-249-420-11	CARBON	1.8K	5%	1/4W	
R113	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R114	1-216-238-00	METAL GLAZE	47K	5%	1/8W	
R115	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R116	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R118	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R119	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R130	1-249-409-11	CARBON	220	5%	1/4W	
R131	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R132	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R136	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R138	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R139	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R140	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R141	1-216-021-00	METAL GLAZE	68	5%	1/10W	
R142	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R143	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R144	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R147	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R148	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R149	1-216-182-00	METAL GLAZE	220	5%	1/8W	
R151	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R152	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R153	1-215-867-00	METAL OXIDE	470	5%	1W	
R199	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R201	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R202	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R203	1-216-298-00	METAL GLAZE	2.2	5%	1/10W	
R204	1-247-741-11	CARBON	150	5%	1/2W	
R205	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R206	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R207	1-216-298-00	METAL GLAZE	2.2	5%	1/10W	
R301	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R302	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R303	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R304	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R305	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R306	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R307	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R308	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R309	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R310	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R311	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R312	1-216-174-00	METAL GLAZE	100	5%	1/8W	
R313	1-216-174-00	METAL GLAZE	100	5%	1/8W	
R314	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R315	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R316	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R317	1-216-202-00	METAL GLAZE	1.5K	5%	1/8W	
R318	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R319	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R320	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R321	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R322	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R323	1-216-192-00	METAL GLAZE	560	5%	1/8W	
R324	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R325	1-249-410-11	CARBON	270	5%	1/4W	
R326	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R327	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R328	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R329	1-216-109-00	METAL GLAZE	330K	5%	1/10W	
R330	1-216-244-00	METAL GLAZE	82K	5%	1/8W	
R331	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R332	1-216-270-00	METAL GLAZE	1M	5%	1/8W	
R333	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R334	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R335	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R336	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R337	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R338	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R341	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R342	1-216-041-00	METAL GLAZE	470	5%	1/10W	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R343	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R346	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R347	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R348	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R349	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R350	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R351	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R352	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R353	1-249-438-11	CARBON	56K	5%	1/4W	
R354	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R355	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R356	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R357	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R360	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R363	1-216-222-00	METAL GLAZE	10K	5%	1/8W	
R364	1-216-222-00	METAL GLAZE	10K	5%	1/8W	
R399	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R402	1-216-172-00	METAL GLAZE	82	5%	1/8W	
R403	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R404	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R405	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R406	1-216-226-00	METAL GLAZE	15K	5%	1/8W	
R407	1-216-226-00	METAL GLAZE	15K	5%	1/8W	
R408	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R409	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R411	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R412	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R413	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R420	1-216-182-00	METAL GLAZE	220	5%	1/8W	
R421	1-216-449-11	METAL OXIDE	56	5%	2W	
R423	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R424	1-216-222-00	METAL GLAZE	10K	5%	1/8W	
R425	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R426	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R427	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R428	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R430	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R431	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R432	1-249-403-11	CARBON	68	5%	1/4W	
R433	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R434	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R435	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R436	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R437	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R501	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R502	1-247-743-11	CARBON	220	5%	1/2W	
R503	1-249-437-11	CARBON	47K	5%	1/4W	
R504	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R505	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R507	1-216-350-11	METAL OXIDE	1.2	5%	1W	F
R508	1-215-867-00	METAL OXIDE	470	5%	1W	
R510	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R511	1-216-244-00	METAL GLAZE	82K	5%	1/8W	
R512	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R513	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R514	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R515	1-216-683-11	METAL CHIP	22K	0.50%	1/10W	
R516	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R517	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R518	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R519	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R520	1-216-258-00	METAL GLAZE	330K	5%	1/8W	
R521	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R522	1-215-863-11	METAL OXIDE	100	5%	1W	
R523	1-247-754-11	CARBON	1.5K	5%	1/2W	
R524	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
R525	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R527	1-215-869-11	METAL OXIDE	1K	5%	1W	
R532	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R533	1-216-133-00	METAL GLAZE	3.3M	5%	1/10W	
R534	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R535	1-216-107-00	METAL GLAZE	270K	5%	1/10W	
R539	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R542	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R543	1-249-408-11	CARBON	180	5%	1/4W	
R545	1-216-286-00	METAL GLAZE	4.7M	5%	1/8W	
R548	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R601 ⚠	1-205-909-11	WIREWOUND	3.3	5%	10W	F
R602	1-214-923-00	CARBON	270K	5%	1/2W	
R603	1-215-903-11	METAL OXIDE	68K	5%	2W	
R604	1-247-752-11	CARBON	1K	5%	1/2W	
R605 ⚠	1-218-265-91	METAL GLAZE	8.2M	5%	1W	
R606	1-212-877-11	FUSIBLE	68	5%	1/4W	
R607	1-249-430-11	CARBON	12K	5%	1/4W	
R608	1-215-884-11	METAL OXIDE	47	5%	2W	
R609	1-207-905-00	WIREWOUND	0.27	10%	2W	
R611	1-214-915-00	CARBON	120K	5%	1/2W	
R612	1-219-137-11	FUSIBLE	0.33	5%	1/4W	
R613	1-217-811-11	FUSIBLE	0.47	5%	1/4W	
R614	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R615	1-216-013-00	METAL GLAZE	33	5%	1/10W	
R617	1-216-354-11	METAL OXIDE	2.7	5%	1W	F
R620	1-216-465-11	METAL OXIDE	27K	5%	2W	
R621	1-216-465-11	METAL OXIDE	27K	5%	2W	
R801	1-217-778-11	FUSIBLE	1K	5%	1W	F
R802	1-217-819-51	FUSIBLE	2.7K	5%	1/4W	
R803	1-216-352-11	METAL OXIDE	1.8	5%	1W	F
R804	1-216-013-00	METAL GLAZE	33	5%	1/10W	
R805	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R806	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R807	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R808	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R809	1-216-748-11	METAL GLAZE	39K	5%	1/10W	
R810	1-216-109-00	METAL GLAZE	330K	5%	1/10W	
R811	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R812	1-215-869-11	METAL OXIDE	1K	5%	1W	F
R813	1-212-877-11	FUSIBLE	68	5%	1/4W	
R814	1-215-868-00	METAL OXIDE	680	5%	1W	F
R816	1-247-883-00	CARBON	150K	5%	1/4W	
R817	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R818	1-202-830-00	SOLID	10K	10%	1/2W	
R819	1-249-448-11	CARBON	1.2	5%	1/4W	F
R820	1-217-811-11	FUSIBLE	0.47	5%	1/4W	
R821	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R822	1-216-204-00	METAL GLAZE	1.8K	5%	1/8W	
R823	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R826	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R827	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R830	1-216-192-00	METAL GLAZE	560	5%	1/8W	
R850	1-215-882-00	METAL OXIDE	22	5%	2W	F
R1301	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1302	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R1303	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R1304	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R1305	1-216-200-00	METAL GLAZE	1.2K	5%	1/8W	
R1306	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R1307	1-216-047-00	METAL GLAZE	820	5%	1/10W	

A C

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1308	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1309	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1310	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R1311	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1312	1-216-222-00	METAL GLAZE	10K	5%	1/8W	
R1313	1-216-025-00	METAL GLAZE	100	5%	1/10W	
		<VARIABLE RESISTOR>				
RV001	1-238-012-11	RES, ADJ, CARBON 1K				
RV331	1-238-012-11	RES, ADJ, CARBON 1K				
RV501	1-238-016-11	RES, ADJ, CARBON 10K				
RV502	1-226-703-11	RES, ADJ, METAL GLAZE 10K				
RV503	1-238-019-11	RES, ADJ, CARBON 47K				
RV504	1-238-019-11	RES, ADJ, CARBON 47K				
RV505	1-238-009-11	RES, ADJ, CARBON 220				
RV801	1-238-015-11	RES, ADJ, CARBON 4.7K				
RV802	1-238-019-11	RES, ADJ, CARBON 47K				
		<SWITCH>				
S001	1-571-532-21	SWITCH, TACTIL				
S002	1-571-532-21	SWITCH, TACTIL				
S003	1-571-532-21	SWITCH, TACTIL				
S601	⚠ 1-571-433-12	SWITCH, PUSH (AC POWER)				
		<SPARK GAP>				
SG801	1-519-422-11	GAP, SPARK				
		<TRANSFORMER>				
T601	⚠ 1-449-275-12	S.R.T				
T603	⚠ 1-421-776-11	LFT				
T604	⚠ 1-424-078-11	TRANSFORMER, TRIGGER PULSE				
T605	⚠ 1-424-391-11	TRANSFORMER, LINE FILTER				
T801	1-437-090-00	HDT				
T802	⚠ 1-439-416-51	TRANSFORMER ASSY, FLYBACK (UX-1650)				
		<THERMISTOR>				
THP601	⚠ 1-808-059-32	THERMISTOR, POSITIVE				
		<TUNER>				
TU101	⚠ 1-465-541-11	TUNER (BT-3C 301)				
		<CRYSTAL>				
X001	1-577-619-11	VIBRATOR, CRYSTAL				
X331	1-567-307-11	OSCILLATOR, CRYSTAL				
X332	1-567-131-00	OSCILLATOR, CRYSTAL				
		<TERMINAL>				
YC1301	1-565-666-12	TERMINAL, S 4P				
**********						
	A-1638-016-A	C BOARD, COMPLETE				
		**********				
	*4-379-160-01	COVER (REAR LID), CV				
	*4-379-167-01	COVER (MAIN), CV				

REF.NO.	PART NO.	DESCRIPTION				REMARK
		<CAPACITOR>				
C703	1-163-129-00	CERAMIC CHIP	330PF	5%	50V	
C704	1-163-007-11	CERAMIC CHIP	680PF	10%	50V	
C705	1-163-191-00	CERAMIC CHIP	270PF	5%	50V	
C706	1-163-007-11	CERAMIC CHIP	680PF	10%	50V	
C707	1-162-116-00	CERAMIC	680PF	10%	2KV	
C708	1-162-114-00	CERAMIC	0.0047MF		2KV	
C709	1-163-007-11	CERAMIC CHIP	680PF	10%	50V	
C710	1-123-947-00	ELECT	10MF	20%	250V	
C712	1-163-129-00	CERAMIC CHIP	330PF	5%	50V	
C714	1-124-360-00	ELECT	1000MF	20%	16V	
C716	1-162-622-11	CERAMIC	330PF	10%	400V	
C717	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C718	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C719	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
		<CONNECTOR>				
CNC71	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P				
CNC72	*1-568-881-51	PIN, CONNECTOR 6P				
CNC81	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P				
CNC82	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P				
		<DIODE>				
D702	8-719-400-18	DIODE MA152WK				
D703	8-719-400-18	DIODE MA152WK				
D704	8-719-400-18	DIODE MA152WK				
D705	8-719-400-18	DIODE MA152WK				
D706	8-719-400-18	DIODE MA152WK				
D707	8-719-400-18	DIODE MA152WK				
D708	8-719-400-18	DIODE MA152WK				
D709	8-719-400-18	DIODE MA152WK				
D710	8-719-400-18	DIODE MA152WK				
D711	8-719-300-33	DIODE RU-3AM				
D714	8-719-800-76	DIODE 1SS226				
D715	8-719-800-76	DIODE 1SS226				
D716	8-719-800-76	DIODE 1SS226				
		<JACK>				
J701	1-526-990-11	SOCKET, PICTURE TUBE				
		<COIL>				
L704	1-410-878-11	INDUCTOR	33UH			
		<TRANSISTOR>				
Q702	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q703	8-729-906-70	TRANSISTOR BF871				
Q704	8-729-200-17	TRANSISTOR 2SA1091-O				
Q705	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q706	8-729-906-70	TRANSISTOR BF871				
Q707	8-729-200-17	TRANSISTOR 2SA1091-O				
Q708	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q709	8-729-906-70	TRANSISTOR BF871				
Q710	8-729-200-17	TRANSISTOR 2SA1091-O				
		<RESISTOR>				
JR1	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR2	1-216-296-00	METAL GLAZE	0	5%	1/8W	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
JR3	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR4	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR6	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR7	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR8	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR12	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR13	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR14	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR15	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR16	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR17	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR18	1-216-296-00	METAL GLAZE	0	5%	1/8W	
R704	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R705	1-202-824-00	SOLID	3.3K	10%	1/2W	
R706	1-216-182-00	METAL GLAZE	220	5%	1/8W	
R707	1-247-822-11	CARBON	430	5%	1/4W	
R708	1-249-401-11	CARBON	47	5%	1/4W	
R709	1-202-844-00	SOLID	330K	10%	1/2W	
R711	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R712	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R713	1-215-469-00	METAL	100K	1%	1/4W	
R714	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R715	1-202-824-00	SOLID	3.3K	10%	1/2W	
R716	1-216-182-00	METAL GLAZE	220	5%	1/8W	
R717	1-249-415-11	CARBON	680	5%	1/4W	
R718	1-202-814-11	SOLID	33K	10%	1/2W	
R719	1-216-166-00	METAL GLAZE	47	5%	1/8W	
R720	1-216-210-00	METAL GLAZE	3.3K	5%	1/8W	
R721	1-202-842-11	SOLID	220K	10%	1/2W	
R722	1-202-848-00	SOLID	680K	10%	1/2W	
R723	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R724	1-202-846-00	SOLID	470K	10%	1/2W	
R725	1-202-838-00	SOLID	100K	10%	1/2W	
R726	1-202-824-00	SOLID	3.3K	10%	1/2W	
R727	1-249-409-11	CARBON	220	5%	1/4W	
R728	1-216-347-11	METAL OXIDE	0.68	5%	1W	F
R729	1-249-416-11	CARBON	820	5%	1/4W	
R730	1-216-166-00	METAL GLAZE	47	5%	1/8W	
R731	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R732	1-216-194-00	METAL GLAZE	680	5%	1/8W	
R733	1-216-194-00	METAL GLAZE	680	5%	1/8W	
R734	1-249-405-11	CARBON	100	5%	1/4W	
R735	1-215-493-00	METAL	1M	1%	1/4W	
R736	1-216-487-11	METAL OXIDE	12K	5%	3W	F
R737	1-215-483-00	METAL	390K	1%	1/4W	
R739	1-216-198-00	METAL GLAZE	1K	5%	1/8W	

<VARIABLE RESISTOR>

RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
RV702	1-230-619-11	RES, ADJ, METAL GLAZE 110M	
RV703	1-237-749-11	RES, ADJ, CARBON 2200	
RV704	1-237-749-11	RES, ADJ, CARBON 2200	

****

A-1645-020-A V BOARD, COMPLETE (KV-M2141K ONLY)
****

<CAPACITOR>

C1	1-126-101-11	ELECT	100MF	20%	16V
C2	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C3	1-124-120-11	ELECT	220MF	20%	16V
C4	1-163-077-00	CERAMIC CHIP	0.1MF		50V
C5	1-124-120-11	ELECT	220MF	20%	16V
C6	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C7	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C8	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C9	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C10	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C11	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C12	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C13	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C14	1-124-927-11	ELECT	4.7MF	20%	50V
C16	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C17	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C23	1-124-927-11	ELECT	4.7MF	20%	50V

<CONNECTOR>

CNV1	*1-565-393-11	CONNECTOR, BOARD TO BOARD
CNV2	*1-565-393-11	CONNECTOR, BOARD TO BOARD

<DIODE>

D1	8-719-105-91	DIODE RD5.6M-B2
D3	8-719-914-44	DIODE DAP202K
D5	8-719-914-44	DIODE DAP202K
D6	8-719-400-18	DIODE MA152WK
D9	8-719-106-17	DIODE RD6.8M-B2

<IC>

IC2	8-759-515-59	IC SAA5246P/H
IC3	8-759-510-49	IC FCB61C65L-70P

<COIL>

L1	1-408-403-00	INDUCTOR	3.3UH
L2	1-408-407-00	INDUCTOR	6.8UH
L3	1-408-407-00	INDUCTOR	6.8UH
L4	1-408-407-00	INDUCTOR	6.8UH

<IC>

PS1	⚠1-532-679-91	LINK, IC (ICP-N15) 0.6A

<TRANSISTOR>

Q1	8-729-900-53	TRANSISTOR DTC114EK
Q2	8-729-920-92	TRANSISTOR 2SD2096-EF
Q3	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q4	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q5	8-729-807-87	TRANSISTOR 2SB1295-UL6
Q6	8-729-807-87	TRANSISTOR 2SB1295-UL6
Q7	8-729-807-87	TRANSISTOR 2SB1295-UL6
Q9	8-729-901-04	TRANSISTOR DTA114EK
Q10	8-729-901-01	TRANSISTOR DTC144EK
Q11	8-729-901-01	TRANSISTOR DTC144EK

<RESISTOR>

JR01	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR02	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR03	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR08	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR09	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR11	1-216-295-00	METAL GLAZE	0	5%	1/10W

V J1

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
JR12	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR13	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR14	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR15	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR16	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR17	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR18	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR19	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR20	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR21	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR22	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR23	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR24	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR26	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR27	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR202	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR203	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR221	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR222	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1	1-218-326-11	METAL GLAZE	470	5%	1/2W	
R2	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R3	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R4	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R5	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R6	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R7	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R8	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R9	1-216-308-00	METAL GLAZE	4.7	5%	1/10W	
R10	1-218-325-11	METAL GLAZE	120	5%	1/4W	
R11	1-218-325-11	METAL GLAZE	120	5%	1/4W	
R12	1-218-325-11	METAL GLAZE	120	5%	1/4W	
R13	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R14	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R15	1-216-013-00	METAL GLAZE	33	5%	1/10W	
R16	1-216-013-00	METAL GLAZE	33	5%	1/10W	
R17	1-216-013-00	METAL GLAZE	33	5%	1/10W	
R18	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R19	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R21	1-216-013-00	METAL GLAZE	33	5%	1/10W	
R22	1-216-168-00	METAL GLAZE	56	5%	1/8W	
R23	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R40	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R42	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R49	1-216-049-00	METAL GLAZE	1K	5%	1/10W	

<VARIABLE RESISTOR>

RV1 1-238-012-11 RES, ADJ, CARBON 1K

<CRYSTAL>

X1 1-579-266-21 CRYSTAL VIBRATOR

****

*1-638-167-11 J1 BOARD
****

<CAPACITOR>

C2200 1-164-232-11 CERAMIC CHIP 0.01MF 50V

<CONNECTOR>

CN2001*1-568-878-51 PIN, CONNECTOR 3P

<JACK>

J2201 1-562-837-11 JACK

<COIL>

L2201 1-408-409-00 INDUCTOR 10UH

****

MISCELLANEOUS
****

⚠ 1-426-383-11 COIL, DEMAGNETIZATION
⚠ 1-451-295-11 DEFLECTION YOKE (Y21PFA2)
1-452-032-00 MAGNET, DISK; 10MM φ
1-452-094-00 MAGNET, ROTATABLE DISK; 15MM φ
1-452-277-00 MAGNET, BMC

1-503-258-21 SPEAKER
⚠ 1-590-460-11 CORD, POWER (WITH CONNECTOR)

V901 ⚠ 8-738-753-05 PICTURE TUBE (A51JXH60X)

****

ACCESSORIES AND PACKING MATERIALS
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PART NO.	DESCRIPTION	REMARK
4-200-610-61	MANUAL, INSTRUCTION (ENGLISH/GERMAN/POLISH/RUSSIAN)	
*4-200-680-01	INDIVIDUAL CARTON	
*4-200-681-01	CUSHION (UPPER) (ASSY)	
*4-200-684-01	CUSHION (LOWER) (ASSY)	
*4-380-340-01	BAG, PROTECTION	

REMOTE COMMANDER

1-465-562-11 CONTROL UNIT, REMOTE (RM-694)
4-395-610-01 COVER, BATTERY (FOR RM-694)

Sony Corporation
TV Group

English
91FJ0406-1
Printed in Japan